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Dissociation and mental health

Aarti Daya

This thesis is submitted in partial fulfilment of the requirements for the degree of
Doctorate in Clinical Psychology

Coventry University, Faculty of Health and Life Sciences

University of Warwick, Department of Psychology

August 2016

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Acknowledgments

Firstly, I would like to thank my participants for taking the time to share their experiences with me. Their willingness to engage and the richness of their narratives have both been touching and thought provoking.

I am incredibly grateful for all the knowledge, support and advice given to me by Dr Eve Knight (Coventry University) and Dr Tom Patterson (Coventry University) throughout the whole process. Thank you for the time and effort you have invested, without which I would have been lost.

I would like to thank all my family for their patience and encouraging words, especially my Dada whose life lessons kept me motivated. I would also like to thank my friends, both old and new, for their patience and the welcome moments of laughter they brought throughout what has, at times, been a challenging process.

Declaration

This thesis is submitted to the University of Warwick and Coventry University in support of my application for the degree of Doctor of Clinical Psychology. It has been written by myself and has not been submitted in any previous application for any degree at another university. This work has been conducted under the supervision of Dr Eve Knight (Programme Director Clinical Psychology Doctorate, Coventry University) and Dr Tom Patterson (Senior Lecturer, Coventry University). In addition to providing research supervision, these supervisors read and commented on drafts of each chapter. Furthermore, validity checks of the data analysis process were conducted by a colleague. Aside from these stated collaborations, all material presented in this thesis is my own work.

The literature review paper has been prepared for submission to *Eating Disorders: The Journal of Treatment & Prevention*. The empirical paper has been prepared for submission to the *Journal of Trauma and Dissociation*. The final chapter, the reflective paper, will not be submitted to a journal for publication.

Summary

This thesis consists of three papers: a literature review, an empirical paper and a reflective paper. The systematic literature review examines the role of dissociation within eating disorders. Thirty-four articles meeting the inclusion criteria were identified through database searches and manual searches. The findings of these articles were reviewed and critically appraised. The evidence reviewed indicates that dissociation in people with an eating disorder diagnosis may have a number of roles. Individuals with an eating disorder diagnosis may use dissociation as a means of managing certain affective states and dissociation may also act as a means of separating oneself from eating disorder symptomatology. In addition, dissociation may play a role in the development of eating disorders in individuals who have also experienced trauma. Methodological limitations, clinical implications and future research recommendations are considered. There is a need for staff in eating disorder services to be aware of dissociation and to use or develop interventions which take this into consideration. Further research, using a wider variety of methodologies, is needed, in particular to further elucidate the relationship of dissociation to eating disorder symptomatology.

The empirical paper is a qualitative exploration of the lived experience of dissociation in individuals with a diagnosis of psychotic disorders. Five participants were interviewed using semi-structured interviews. The transcripts of interviews were analysed using Interpretative Phenomenological Analysis. One super-ordinate theme emerged from the analysis. 'Emotional impact of unsafe uncertainty' describes the emotions evoked by dissociative experiences and the uncertainty that surrounds exploration of these experiences for participants. Themes are discussed and considered in relation to clinical implications. Further research is needed to more carefully consider the role of dissociation within psychotic disorders.

Finally, the reflective paper discusses the author's experience of the process of research and exploring experiences of dissociation in individuals with a diagnosis of psychotic disorders. This paper utilises an Acceptance and Commitment Therapy approach to support personal reflection and reflexivity.

Total word count: 20, 013 (excluding tables, figures, footnotes, references and appendices)

List of abbreviations

ACT	Acceptance and Commitment Therapy
BED	Binge Eating Disorder
CADSS	Clinician Administered Dissociative States Scale
DDIS	Dissociative Disorders Interview Schedule
DES	Dissociative Experiences Scale
DIS-Q	Dissociation Questionnaire
DSM-5	Diagnostic and Statistical Manual of Mental Disorders 5th edition
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders fourth edition
EDNOS	Eating Disorder Not Otherwise Specified
IPA	Interpretative Phenomenological Approach
PDES	Peritraumatic Dissociation Experiences Scale
PRISMA	Preferred Reporting Items for Systematic Review and Meta-analyses
PTSD	Post-Traumatic Stress Disorder
QED	Questionnaire of Experiences of Dissociation
SDQ	Somatoform Dissociation Questionnaire
TSC	Trauma Symptom Checklist
USA	United States of America
UK	United Kingdom

Chapter 1: Literature Review

The role of dissociation in eating disorders: a systematic review of the literature

In preparation for submission to the Eating Disorders: The Journal of Treatment &
Prevention

(See Appendix A for author instructions for submission)

Word count: 8,448 (not including tables, figures and references)

1.1. Abstract

Purpose: Studies have found an association between eating disorders and dissociation. There has also been interest in the differences in severity of dissociation across different diagnostic categories of eating disorders. When considering the impact of dissociation for individuals with an eating disorder diagnosis, it has been suggested that dissociation may impact on treatment outcomes. However, the precise role, if any, of dissociation in eating disorders is still somewhat unclear. The aim of the present systematic review is to critically evaluate existing empirical evidence regarding the role of dissociation in eating disorders. **Method:** Using PsycINFO, Medline (OVID), Embase and Web of Science 34 studies were identified that met the inclusion and quality assessment criteria, all of which investigated the possible role that dissociation may play within eating disorders. **Results:** Dissociation can impact upon eating disorders in a number of ways. Individuals with an eating disorder diagnosis may use dissociation as a means of managing affect and dissociation may act as a means of separating oneself from eating disorder symptomatology. Dissociation may also play a role in the development of eating disorders in individuals who have experienced trauma. **Conclusion:** It is concluded that eating disorder services need to be aware of dissociative experiences and treatment should include models which address dissociation. Future studies exploring the role of dissociation within eating disorders may consider using qualitative methodologies to bring a richer description of the subjective experiences of dissociation in individuals with an eating disorder diagnosis.

Keywords: Dissociation, Eating Disorders, Systematic literature review

1.2. Introduction

1.2.1. Dissociation

The Diagnostic and Statistical Manual of Mental Disorders 5th edition (DSM-5) defines dissociative disorders as a “disruption of and/or discontinuity in the normal integration of consciousness, memory, identity, emotion, perception, body representation, motor control, and behaviour” (American Psychiatric Association, 2013, p. 291). It is thought to exist along a continuum of severity with, at one end, non-pathological everyday experiences of dissociation (such as daydreaming or doing things on ‘automatic pilot’). At the other end lie more chronic, complex and pathological forms of dissociation such as dissociative amnesia, depersonalisation/derealisation or dissociative identity disorder which can affect the individual’s ability to function (Mulder, Beautrais, Joyce, & Fergusson, 1998). It is thought that everybody dissociates for approximately ten percent of the day, which involves the individual losing conscious awareness of their surroundings (Diseth, 2005). Studies have also estimated that 3-5% of the population suffer from high levels of dissociation; dissociative experiences which occur frequently and impact on their daily functioning (Maaranen et al., 2005; Putnam et al., 1996).

Research on the possible causes of dissociation suggests a reaction to psychological stress, strain or trauma (Alayarian, 2011; Collin-Vézina, Coleman, Milne, Sell, & Daigneault, 2011; Diseth, 2005; Liotti, 2006; Schauer & Elbert, 2010; Wright, Crawford, & Del Castillo, 2009). One variable which has been identified as a possible aetiological factor in dissociation is traumatic experiences, particularly experiences of childhood abuse (Dutra, Bureau, Holmes, Lyubchik, & Lyons-Ruth, 2009). It is argued by Van der Kolk (2005) that, due to the distress caused by the trauma, children are unable to regulate their arousal which causes a breakdown in their capacity to process and integrate what is happening. Children are then likely to dissociate as a defence against the resulting distress and pain. It has also been argued that, when individuals are in life-threatening or traumatic circumstances, they may automatically dissociate as a response

to those situations in order to protect themselves from what they are not ready or able to process (Alayarian, 2011).

There have been a number of studies exploring the relationships between dissociation and childhood trauma, predominantly focussing on sexual and physical abuse (Aydin, Altindag, & Ozkan, 2009; Boysan, Goldsmith, Çavuş, Kayri, & Keskin, 2009; Daisy & Hien, 2014; Trickett, Noll, & Putnam, 2011). More recently researchers have started to explore the effects of emotional abuse or neglect on dissociative symptoms and have found that there is a stronger relationship between emotional abuse and dissociation when compared to the strength of association between dissociation and sexual abuse or physical abuse (Braehler et al., 2013; Collin-Vézina et al., 2011; Mueller-Pfeiffer et al., 2013; Schäfer et al., 2012).

1.2.2. Dissociation and mental health

Dissociation has been associated with a wide range of mental health difficulties including Post-Traumatic Stress Disorder (PTSD) and Borderline Personality Disorder (Karatzias, Power, Brown, & McGoldrick, 2010; Korzekwa, Dell, Links, Thabane, & Fougere, 2009; Watson, Chilton, Fairchild, & Whewell, 2006; Wolf et al., 2012). For example, persistent dissociation after traumatic experiences has been found to be a possible aetiological factor in PTSD (Briere, Scott, & Weathers, 2005) and peritraumatic dissociation has been shown to predict increased PTSD symptomology (Kumpula, Orcutt, Bardeen, & Varkovitzky, 2011; Murray, Ehlers, & Mayou, 2002). Studies have indicated that dissociation partially mediates the relationship between peritraumatic distress and PTSD severity and that controlling for dissociation reduced the direct relationship between childhood abusive experiences and PTSD symptoms (Otis, Marchand, & Courtois, 2012; Wang, Cosden, & Bernal, 2011).

In other research, dissociation has been associated with self-harming behaviours. When exploring this relationship dissociation and somatisation were found to be related to

recurrent self-injurious behaviour (Franzke, Wabnitz, & Catani, 2015; Gandy, 2014; Yates, Carlson, & Egeland, 2008). In attempting to account for this finding, Yates et al. (2008) suggest that self-harming may either act to induce dissociative experiences as a means of disconnecting from emotions or that it may act as an anchor through grounding individuals who are experiencing dissociation.

Frankze, Wabnitz and Catani (2015) conducted a path analysis to investigate pathways that may lead to non-suicidal self-injurious behaviour and found a significant indirect effect of childhood trauma on self-injurious behaviour via dissociative symptoms. They did not find a similar relationship for post-traumatic stress or depressive symptoms, suggesting that dissociative symptoms may increase risk for self-harm in individuals who have been maltreated. Similarly, there has been interest in the relationship between dissociation and eating disorders, as eating disorders can be viewed as a form of self-destructive behaviour. Studies in non-clinical populations have found significant correlations between dissociation and severity of eating disorder related symptoms (Fuller-Tyszkiewicz & Mussap, 2008; McShane & Zirkel, 2008; Valdiserri & Kihlstrom, 1995).

1.2.3. Dissociation and Eating disorders

The DSM-5 (American Psychiatric Association, 2013) defines feeding and eating disorders as a persistent disturbance of eating or eating-related behaviour that results in an altered consumption of food that impairs psychosocial functioning or physical health. It includes Anorexia Nervosa (restrictive type and binge-eating/purging type), Bulimia Nervosa, Binge Eating Disorder (BED) and Eating Disorder Not Otherwise Specified (EDNOS)¹. This has changed from the Diagnostic and Statistical Manual of Mental Disorders fourth edition (DSM-IV), which only included Anorexia Nervosa (restrictive type

¹ Where diagnostic categories are clear these terms will be used. The term *bulimia* will be used to refer to any eating disorder which involved a binge-purge cycle. This reflects the usage of the term in several of the studies reviewed here.

and binge-eating/purging type), Bulimia Nervosa (purging type and non-purging type) and EDNOS (includes Binge Eating Disorder) (American Psychiatric Association, 1994).

Among the general population, eating disorders are relatively rare, however, individuals with eating-related problems tend to conceal their difficulties and avoid seeking professional help (Smink, van Hoeken, & Hoek, 2012). In a review of epidemiological studies, Smink et al. (2012) found prevalence rates of 1.2%-2.2% for Anorexia Nervosa, 0.9%-2.9% for Bulimia Nervosa and 0.35%-3.5% for Binge Eating Disorder. Harris and Barraclough (1998) argued that individuals with an eating disorder diagnosis had the highest risk of premature death when compared with other mental health difficulties. More recently, studies have found mortality ratios of between 4.37 per 1000 and 6.51 per 1000 for Anorexia Nervosa, 2.33 per 1000 and 2.97 per 1000 for Bulimia Nervosa, and 1.77 per 1000 for Binge Eating Disorder, with contributing factors including suicide, low weight and poor psychosocial functioning (Franko et al., 2013; Smink et al., 2012; Suokas et al., 2013).

Long term treatment outcomes for eating disorders are relatively poor (Berkman, Lohr, & Bulik, 2007; Fichter, Quadflieg, & Hedlund, 2006; Keel & Brown, 2010). Cowan and Heselmeyer (2011) argue that this may be due to the high levels of dissociative experiences found in individuals with an eating disorder diagnosis. Research (Demitrack, Putnam, Brewerton, Brandt, & Gold, 1990; La Mela, Maglietta, Castellini, Amoroso, & Lucarelli, 2010; Schumaker, Warren, Schreiber, & Jackson, 1994; Waller et al., 2003) has shown that individuals with an eating disorder diagnosis have reported higher levels of dissociation when compared to control participants. There has also been interest in exploring the relationship between dissociation and the different diagnostic categories of eating disorders, in particular bulimia as it is argued that individuals with bulimia report higher scores of dissociation compared to individuals with a diagnosis of restrictive type Anorexia Nervosa (Grave, Rigamonti, Todisco, & Olivosi, 1996).

Cowan and Heselmeyer (2011) propose two dimensions of dissociation within Bulimia Nervosa. The first dimension includes episodic dissociative experiences such as blankness, disorientation and the disruption of thought processes which can occur prior to and during binge-purge episodes. The second dimension suggests a “long-term structural organisation of personality” where certain types of thoughts and affect are partitioned off or separated from the normal self, due to a lack of validation from the primary caregiver in childhood (Cowan & Heselmeyer, 2011, p. 131).

Everill and Waller (1995) hypothesise that a reliance on dissociation as a defence mechanism due to childhood trauma may influence the development of eating disorders. They argue that traumatic events trigger the development of maladaptive schemas which, when triggered, cause emotional distress. In order for the individual to cope with this distress, they dissociate and disconnect from these feelings, forming dissociative schemas. These authors go on to propose that a trigger which relates in some way to the trauma awakens powerful emotions which cannot be blocked by the dissociative schema and the individual lacks alternative appropriate coping strategies. Therefore, the manipulation of food becomes a strategy of coping and bingeing behaviour is used to relieve emotional distress. The use of bulimic behaviours over time is likely to lead to a poor self-image, which in turn causes increased emotional distress and acts as a trigger for impulsive behaviours. A cycle is created where there is a continued reliance on dissociation and blocking behaviours, such as bingeing and purging, to relieve emotional distress.

1.2.4. Rationale and aims for review

Studies have found an association between eating disorders and dissociation. There has also been interest in the differences in severity of dissociation with different diagnostic categories of eating disorders. Dissociation may be acting as a defence mechanism against recollection of trauma and eating disorder symptoms may act as a way of managing emotional distress caused by dissociative experiences. When

considering the impact of dissociation for individuals with an eating disorder diagnosis it has been suggested that dissociation may impact on treatment outcomes. However, the precise role, if any, of dissociation in eating disorders is still somewhat unclear. Therefore, synthesising and critically appraising this research may help to further our understanding of the role of dissociation in eating disorders. This may, in turn, have implications for both clinical practice and future research in this area. Therefore, the aim of the present literature review is to critically evaluate existing empirical evidence on the role of dissociation in eating disorders.

1.3. Method

1.3.1. Literature Search

An initial search of the Cochrane Database of Systematic Reviews was conducted to check if there were any existing systematic reviews in this area and no reviews on the role of dissociation within eating disorders were found. Using the search terms described in table 1.1 a systematic search using the following academic databases was conducted: Psycinfo; Medline; Embase; and Web of Science. In addition, the reference lists of extracted articles were examined by hand for additional relevant articles.

Table 1.1 presents an overview of the key search terms, considered most relevant to the subject area of interest, used in this review. These terms included the main concepts of dissociation and eating disorders, synonyms and location of the key words within the database search. The search strategy involved (Dissociat*) AND (Eating OR Anorex* OR Bulim* OR Binge*). The asterisk indicates truncated terms. These were used to capture articles using variants on the main terms.

Table 1.1: Key search terms for systematic review

Main Concepts	Synonyms	Location
Dissociation	Dissociat*	Title
		Abstract
		Main text
Eating Disorder	Eating	Title
	Anorex*	Abstract
	Bulimi*	
	Binge*	

1.3.2. Inclusion and exclusion criteria

Article titles and abstracts were initially screened and retained if they were written in the English language, were peer reviewed, explored the relationship between dissociation and eating disorders and the full text was accessible. Following initial screening, full text articles were obtained and assessed for eligibility for review according to the following set of specific inclusion criteria.

Table 1.2 highlights the inclusion and exclusion criteria used in the present literature review. Studies were included if participants had an eating disorder and the studies explored dissociation within the context of a diagnosed eating disorder. No limits were placed on the design of the study, sample size, recruitment method used or method of data collection. Studies were included for review if they formally assessed/measured dissociation within the context of a diagnosed eating disorder. Studies were excluded if the subjects were from a community or non-clinical sample, the paper was descriptive in nature (for example, describing a theory or model) and if they were purely assessing reliability and validity of measures. Although community and non-clinical samples were excluded, studies were included if community or non-clinical participants were recruited as control participants and the data for the clinical sample was reported separately.

Table 1.2: Inclusion and exclusion criteria of the present literature review

Include	Empirical studies published in peer reviewed journals that meet the following criteria: <ul style="list-style-type: none">• dissociation in the context of an eating disorder• studies of clinical samples where participants have an eating disorder diagnosis of any type
Exclude	<ul style="list-style-type: none">• Empirical studies with a primary focus on assessing the utility of self-report measures of dissociation.• Empirical studies of non-clinical or community samples.• Studies which included participants with comorbidities where eating disorder is not the primary diagnosis.• Non peer-reviewed studies.• Descriptive case reports.• Theoretical papers with no empirical investigation.

1.3.3. Classification of studies

The process of study selection was recorded on a Preferred Reporting Items for Systematic Review and Meta-analyses (PRISMA) flow diagram (see Figure 1.1) (Moher, Liberati, Tetzlaff, Altman, & The PRISMA Group, 2009). In total 2,015 articles were initially identified, of which 888 were duplicates, resulting in 1,095 to be considered against the inclusion and exclusion criteria. Following a manual review of the titles and abstracts a further 1,006 records were excluded as not relevant. The full texts for the remaining 89 articles were reviewed and a further 55 were excluded. Thus following a search of the literature, a total of 34 studies met the inclusion criteria and were retained for review.

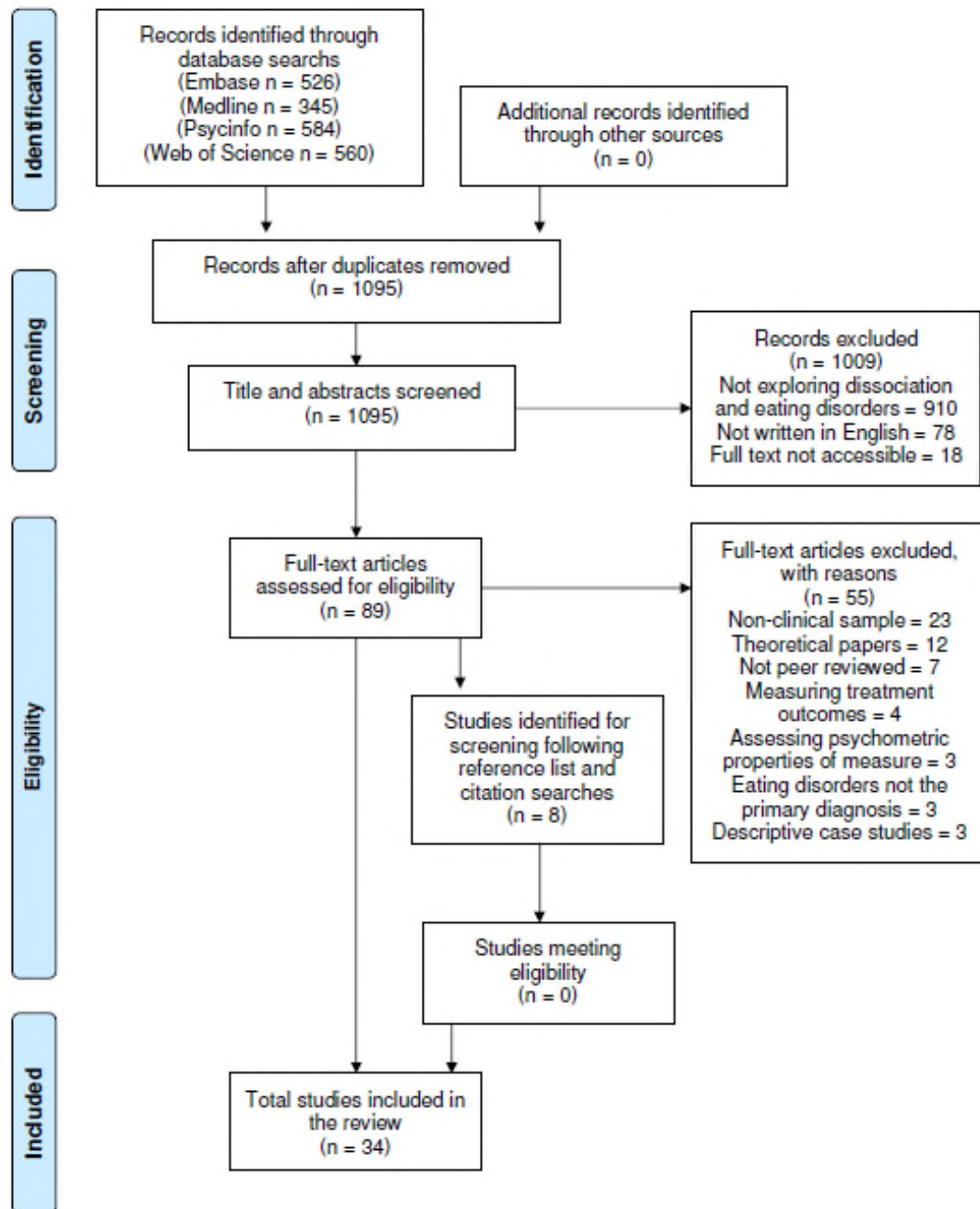


Figure 1.1: PRISMA diagram

1.3.4. Quality assessment

In order to assess the quality of the 34 studies for review, the assessment framework developed by Caldwell, Henshaw and Taylor (2011) was used. This framework was considered suitable for the present review as it can be applied to both quantitative and qualitative research. The framework has also been used within a number of other healthcare and social care literature reviews (Boyle, 2015; Hobbs, 2015; Rodolpho, Hoga, Reis-Queiroz, & Jamas, 2015).

Quantitative and qualitative studies were assessed separately. All studies were scored against eighteen quality criteria and for each criterion studies were rated as 0 if the criterion was not met, 1 if the criterion was partially met and 2 if the criterion was fully met. The rating for each article was calculated by adding the scores for all 18 criteria, so that each article would receive a score between 0 and 36. Papers scoring 18 or above were considered to have a satisfactory level of rigour in terms of the quality assessment framework.

To enhance the reliability of the quality assessment another researcher independently rated three articles against the same quality assessment criterion and an inter-rater reliability analysis using the Kappa statistic was performed. The results ($Kappa = 0.83$) suggest strong inter-rater agreement (McHugh, 2012).

All of the 34 papers resulted in an above mid-point score on the quality assessment framework. Therefore, no papers were excluded on the basis of quality. Total scores ranged from 18 to 34 with a mean score of 24.9 (see Appendix B for details of the quality assessment).

1.4. Results

1.4.1. Summary of the reviewed studies

A summary of the key characteristics of the 34 articles included in this review can be found in table 1.3. In two instances, authors reported findings based on a single sample in two different journal articles. Similarly, in one instance a study reported the same data in two different papers, though an additional control was included in the second paper. For the purpose of the present review, the findings from these “duplicate” studies will be considered together as if from a single study.

1.4.2. General study characteristics

1.4.2.1. Aims

The studies had a variety of aims in their exploration of the role of dissociation within eating disorders. Three studies aimed to explore the relationship or link between eating disorders and dissociation. Ten studies investigated the relationship between childhood abuse, eating disorders and dissociation. Five studies aimed to consider the relationship between eating disorders, self-injurious behaviour and dissociation. Two studies specifically explored dissociation in relation to binge eating behaviour, four investigated dissociation in relation to eating disorder symptoms, seven considered the relationship of dissociation in eating disorders with co-morbid disorders and two studies examined the influence of dissociation on dissatisfaction with body image. One experimental study investigated the effects of subliminal threats on levels of state dissociation.

Table 1.3: Summary of the key characteristics of the articles reviewed

Author, Date and Country	Study Aim	Research Design	Sample population	Method of data collection and analysis	Key Findings	Quality Assessment Rating
Beato, Cano, & Belmonte (2003) Spain	Investigate the predictive value of dissociative experiences for the degree of dissatisfaction toward their own body, taking into account the effects of self-esteem in patients with eating disorders.	Cross-sectional design	118 outpatients Aged between 13 and 47 Mean age 22.50 115 female and 3 male 22 Anorexia Nervosa (restricting subtype) 10 Anorexia Nervosa (purging subtype) 42 Bulimia Nervosa (purging subtype) 6 Bulimia Nervosa (non-purging subtype) 38 Eating Disorder Not Otherwise Specified 58 students from a nursing school Aged between 21 and 30 Mean age 22.17 58 female and 6 male	Five measures Eating Attitudes Test Bulimia Investigatory Test – Edinburgh Dissociative Experiences Scale Rosenberg Self-esteem Scale Body Shape Questionnaire t-test Chi-square test One-way analysis of variance Scheffé's test Forward stepwise multiple regression	<ul style="list-style-type: none"> 30.5% of eating disordered individuals were identified at high risk for dissociative disorders. Individuals with a diagnosis of an eating disorder, predominantly bulimia purging type and eating disorders not otherwise specified, show higher levels of dissociation than the controls ($F = 4.248$, $df = 5$, $p < 0.001$). There was a significant relationship between dissociation and body shape disturbance ($\beta = 0.391$, $t = 4.532$, $p < 0.001$). No such relationship was found in control participants. 	21
Berger et al. (1994) Japan	Study the occurrence of dissociative symptoms and multiple personality disorder in Japan	Cross-sectional design	44 female outpatients recruited from a research centre Aged between 17 and 37, mean age 24 35 Bulimia Nervosa 1 Anorexia Nervosa 8 Anorexia Nervosa and Bulimia Nervosa	Two measures: Dissociative Experiences Scale Dissociative Disorders Interview Schedule t-test Chi-square	<ul style="list-style-type: none"> Individuals who met the criteria for multiple personality disorder scores significantly higher than individuals who did not meet the criteria for multiple personality disorder ($t = 2.41$, $p < 0.05$). 	27

Brown, Russell, Thornton, & Dunn (1999) Australia	Examine the relationship between childhood abuse, eating disorders and dissociation	Cross-sectional design	38 inpatients from a specialised eating disorder unit 79 past patients Aged between 18 and 47 2 male and 115 female 41 Anorexia Nervosa (restricting subtype) 19 anorexia and bulimia 43 normal weight bulimia 11 Eating Disorder Not Otherwise Specified	Two questionnaires Finkelhor Sexual Life Events Inventory Dissociation Questionnaire One-way analysis of variance Chi-squared analysis	<ul style="list-style-type: none"> Dissociative experiences are common in individuals with eating disorder and more specifically those who report a history of child sexual abuse ($F_{1, 110} = 16.07, p < 0.0002$) or adult sexual abuse ($F_{1, 110} = 14.39, p < 0.0004$). No significant difference was found in dissociative scores between diagnostic groups. Self-harming behaviour was significantly associated with higher levels of dissociation ($F_{1, 112} = 8.3, p < 0.006$). 	27
Claes & Vandereycken (2007)* Belgium	Investigate the frequency of different types of self-injurious behaviour and traumatic experiences in individuals with an eating disorder diagnosis. Examine the association between particular characteristics of self-injurious behaviour and trauma characteristics. Explore the mediating role of dissociation, self-esteem and impulsiveness.	Cross-sectional design	70 inpatients from a specialist eating disorder unit Mean age 21.7 years 23 Anorexia Nervosa (restricting subtype) 18 Anorexia Nervosa (binge/purging subtype) 29 Bulimia Nervosa	Five measures Self-Injury Questionnaire Traumatic Experiences Questionnaire Dissociation Questionnaire Leiden Impulsiveness Scale Hostility and Direction of Hostility Questionnaire Chi-square Analysis of variance Scheffé's post-hoc test	<ul style="list-style-type: none"> Individuals who had experienced sexual abuse who engaged in self-injurious behaviour scored significantly higher on identity confusion ($F = 6.90, p < 0.01$), amnesia ($F = 4.66, p < 0.05$) and adsorption ($F = 4.57, p < 0.05$) subscales of dissociation compared to individuals who experienced sexually abuse but did not engage in self-injurious behaviour. 	25

Claes, Vandereycken, & Vertommen (2003)* Belgium	Investigate the relationship between self-injurious behaviours and psychopathological features in individuals with an eating disorder diagnosis.	Cross-sectional design	70 inpatients from a specialist eating disorder unit Mean age 21.7 years 23 Anorexia Nervosa (restricting subtype) 18 Anorexia Nervosa (bingeing-purging subtype) 29 Bulimia Nervosa	Thirteen measures Self-Injury Questionnaire Symptom Checklist Munich Alcohol Test Suicidal Ideation Scale ADP-IV questionnaire Leiden Impulsiveness Scale Traumatic Experiences Questionnaire Dissociation Questionnaire Body Attitude Test State-trait Anger Scale Aggression Questionnaire Hostility and Direction of Hostility Questionnaire Likelihood-ratio chi-square statistic Analysis of variance Scheffé's post-hoc test	<ul style="list-style-type: none"> Individuals with an eating disorder diagnosis who engaged in self-injurious behaviour reported more dissociative experiences ($F = 21.36$, $p < 0.001$) compared to individuals with an eating disorder diagnosis who do not engage in self-harming behaviour. Individuals with an eating disorder diagnosis who engage in self-injurious behaviours, compared to those who do not, scored significantly higher on identity confusion ($F = 13.51$, $p < 0.01$), loss of control ($F = 21.85$, $p < 0.001$) and amnesia ($F = 13.34$, $p < 0.001$). 	25
Demitrack et al. (1990) USA	Establish whether dissociative experiences are evident in individuals with eating disorder and to characterise the associated clinical phenomenology.	Cross-sectional design	30 female patients recruited from an eating disorder unit Aged between 16 and 39 12 Anorexia Nervosa Mean age 23.5 18 Bulimia Nervosa Mean age 23.1 30 age-matched females	Five measures Dissociative Experiences Scale State scale of the State-trait Anxiety Inventory Beck Depression Inventory Barrett Impulsivity Scale Cortisol measure Matched pairwise comparisons Wilcoxon signed-rank test	<ul style="list-style-type: none"> Individuals with bulimia ($z = 2.85$, $df = 17$, $p < 0.01$) and anorexia ($z = 2.35$, $df = 11$, $p < 0.02$) showed significantly higher scores of dissociation when compared to age-matched controls. Within the eating disorder group a significantly higher incidence of self-harm was noted in individuals with more 	21

			Aged between 17 and 38 Mean age 22.8	Spearman's correlations t-test	<ul style="list-style-type: none"> severe dissociative experiences ($p = 0.03$). This greater incidence of self-harm did not generally reflect greater levels of impulsivity. No significant relationship was found between Beck depression inventory scores and self-harmful behaviour. 	
Engelberg, Steiger, Gauvin, & Wonderlich (2007) Canada	Understand binge antecedents within bulimia syndromes	Cross-sectional design Naturalistic self-monitoring	<p>33 women accessing outpatient services of a specialised eating disorders program Mean age was 23.7 years.</p> <p>24 Bulimia Nervosa (purging subtype) 1 Bulimia Nervosa (Non-purging subtype) 8 Eating Disorder Not Otherwise Specified</p>	<p>Eating disorder examination (semi-structured interview) Electronic self-monitoring diary measuring eating behaviour, affect and dissociative experiences</p> <p>Hierarchical linear modelling Multivariate analyses</p>	<ul style="list-style-type: none"> Dissociation in the period prior to bingeing increased the probability of subsequent bingeing (OR = 2.07, 95% confidence interval: 1.31, 3.28). Effects of dissociation on eating behaviour were independent of the effects of affect and time of day. 	32
Espeset et al. (2011) Norway	Construct a theoretical understanding of the nature of body image disturbance.	Qualitative	<p>32 females with a diagnosis of Anorexia Nervosa Aged between 20 and 35 Mean age 27.3 years</p>	<p>Semi-structured interviews</p> <p>Grounded Theory</p>	<ul style="list-style-type: none"> There are two constructs of body image: subjective reality and objective reality. Four phenotypes were derived: integration, denial, dissociation and delusion. 	34

Everill, Waller, & Macdonald (1995a) United Kingdom	Investigate the links between different forms of dissociation and eating psychopathology	Cross-sectional design	26 females from an eating disorder clinic and self-help group Mean age 22.6 years 4 Anorexia Nervosa (bulimia subtype) 9 Bulimia Nervosa with history of Anorexia Nervosa 14 Bulimia Nervosa no history of Anorexia Nervosa Control group 100 female undergraduate students Mean age 21.6	Two questionnaires Eating Attitudes Test Dissociative Experiences Scale II Analysis of variance Pearson's correlation	<ul style="list-style-type: none"> Individuals with an eating disorder diagnosis showed higher levels of dissociative experiences when compared to controls ($F = 3.29$, $p < 0.04$). There was a link between bingeing and dissociation ($r = 0.59$, $p < 0.001$). The key variable was absorption ($r = 0.64$, $p < 0.001$). 	28
Everill, Waller, & Macdonald (1995b) United Kingdom	Test a proposed model that links sexual abuse, dissociation and bulimia symptomatology	Cross-sectional design	42 females from an eating disorder service for university students 10 females from a NHS clinic 8 females from a self-help group Mean age 22.8 5 Anorexia Nervosa (restrictive subtype) 10 Anorexia Nervosa (bulimia subtype) 30 Bulimia Nervosa no history of Anorexia Nervosa 15 Bulimia Nervosa with history of Anorexia Nervosa	Two measures Eating Attitudes Test Dissociative Experiences Scale Analysis of variance	<ul style="list-style-type: none"> No significant association between sexual abuse and eating disorders. History of sexual abuse was associated with greater frequency of bingeing ($F = 6.01$, $p < 0.02$). Individuals with a history of sexual abuse had significantly greater levels of dissociation ($F = 7.46$, $p < 0.01$). Dissociation acts as a mediating factor between sexual abuse and frequency of bingeing. 	25

Farrington et al. (2002) United Kingdom	Investigate the relationship between dissociation and other psychological symptoms across individuals with a diagnosis of Anorexia Nervosa and control groups.	Cross-sectional design	<p>20 female adolescents with a diagnosis of Anorexia Nervosa recruited from two eating disorder services Aged between 11 and 17 Mean age 16.2 years</p> <p>Mixed clinical group of 19 female adolescents Aged between 12 and 17 Mean age 16.0 years</p> <p>Nonclinical group of 210 adolescents recruited from secondary school and college 104 males and 106 females</p>	<p>Two measures Adolescent Dissociative Experiences Scale Brief Symptom Inventory</p> <p>Multivariate analysis of variance Pearson's correlation</p>	<ul style="list-style-type: none"> Adolescents with a diagnosis of Anorexia Nervosa did not have significantly higher scores than the clinical and nonclinical groups. Dissociation in adolescents with a diagnosis of Anorexia Nervosa correlated positively with interpersonal sensitivity ($r = 0.73$, $p < 0.0033$), hostility ($r = 0.62$, $p < 0.0033$) and paranoid ideation ($r = 0.75$, $p < 0.0033$). 	31
Gleaves & Eberenz (1995) USA	Examine the relationship between dissociative experiences and other clinical variables among women with eating disorders	Cross-sectional design	<p>53 females at a residential facility for eating disorders Aged between 15 and 50</p> <p>15 Anorexia Nervosa 27 Bulimia Nervosa 8 Eating Disorder Not Otherwise Specified</p>	<p>Seven questionnaires Dissociative Experiences Scale Dissociation scale from the Trauma Symptom Checklist Eating Disorder Inventory Eating Attitudes Test Bulimia Test-revised Beck Depression Inventory Minnesota Multiphasic Personality Inventory-2</p> <p>Pearson's correlations</p>	<ul style="list-style-type: none"> Dissociative experiences were uncorrelated with bulimia behaviour. Dissociation showed some significant associations with anorexia symptoms however; when depression and anxiety variables were accounted for these correlations were no longer significant. Depression ($r = 0.55$, $p < 0.001$) and anxiety ($r = 0.47$, $p < 0.001$) were 	21

				Multivariate analysis of variance Stepwise multiple regression analysis	<ul style="list-style-type: none"> significantly correlated with dissociation. Schizotypal symptoms were significantly correlated with the dissociation measure ($r = 0.50$, $p < 0.0001$). 	
Grave, Oliosi, Todisco, & Bartocci (1996a)** Italy	Investigate the relationship between trauma, dissociative experiences and eating psychopathology	Cross-sectional design	<p>106 female patients recruited from an eating disorder centre</p> <p>30 Anorexia Nervosa (restricting type) Mean age 21.9</p> <p>22 Anorexia Nervosa (binge/purge type) Mean age 24.9</p> <p>24 normal weight Bulimia Nervosa Mean age 22.3</p> <p>30 Binge Eating Disorder Mean age 36.4</p> <p>20 female inpatients with a diagnosis of schizophrenia Mean age 33.9</p> <p>112 female high school student Mean age 18.1</p>	<p>Two measures</p> <p>Dissociation Questionnaire</p> <p>Self-report questionnaire/Clinical interview for traumatic experiences</p> <p>ANOVA</p> <p>Chi-squared</p>	<ul style="list-style-type: none"> Individuals with an eating disorder diagnosis reported significantly higher experiences of dissociation than control and individuals with a diagnosis of schizophrenia ($F_{5, 232} = 17.05$, $p < 0.0001$). Individuals with an eating disorder diagnosis, when compared to control and individuals with a diagnosis of schizophrenia, reported significantly higher scores on subscales of identity confusion ($F_{5, 232} = 29.62$, $p < 0.0001$), loss of control ($F_{5, 232} = 7.43$, $p < 0.0005$), amnesia ($F_{5, 232} = 4.96$, $p < 0.01$) and absorption ($F_{5, 232} = 9.3$, $p < 0.0001$). Individuals with a diagnosis of Bulimia Nervosa reported significantly higher levels of dissociation when compared to individuals with a diagnosis of Binge 	22

					<p>Eating Disorder (p<0.005).</p> <ul style="list-style-type: none"> • Individuals with a diagnosis of Bulimia Nervosa, when compared to individuals with a diagnosis of Binge Eating Disorder, reported significantly higher scores on subscales of identity confusion (p<0.005) , Loss of control (p<0.05) and absorption (p<0.001). • Individuals with a diagnosis of Anorexia Nervosa binge/purge subtype, when compared to individuals with a diagnosis of Binge Eating Disorder, reported significantly higher scores on subscales of identity confusion (p<0.01) , Loss of control (p<0.05) and absorption (p<0.001). 	
Grave, Oliosi, Todisco, & Vanderlinden (1997) Italy	Compare the difference of reported dissociative experiences and traumatic experiences in obese individuals with and without a diagnosis of Binge Eating Disorder. Evaluate the difference between those who have experienced trauma and those who have not	Cross-sectional design	64 female inpatients admitted to a specialised inpatient centre Mean age 36.4 years 29 had a diagnosis of Binge Eating Disorder 35 were part of the clinical control group	One measure Dissociation Questionnaire Traumatic experiences was assessed at the initial clinical interview Analysis of variance	<ul style="list-style-type: none"> • Individuals with a diagnosis of Binge Eating Disorder reported significantly higher levels of identity confusion (F = 6.1, df = 62, p<0.01) and loss of control (F = 3.8, df = 62, p<0.05). 	18

	experienced trauma with regard to dissociative experiences.					
Grave, Rigamonti, Todisco, & Olios (1996b)** Italy	Investigate the presence of trauma and dissociative experiences in eating disorders	Cross-sectional design	<p>103 female patients from an eating disorder centre</p> <p>30 Anorexia Nervosa (restricting type) Mean age 21.9</p> <p>12 Anorexia Nervosa (bulimia type) Mean age 25.7</p> <p>17 normal weight Bulimia Nervosa Mean age 21.2</p> <p>30 obese Binge Eating Disorder Mean age 36.4</p> <p>14 obese without eating disorder Mean age 40.5</p> <p>112 female high school students Mean age 18.1</p>	<p>Two measures Dissociation Questionnaire Self-report questionnaire/Clinical interview for traumatic experiences</p> <p>ANOVA Scheffé's test</p>	<ul style="list-style-type: none"> Eating disordered individuals reported higher levels of dissociative experiences when compared to controls ($F_{1, 213} = 19.81$, $p < 0.0001$). Individuals with Binge Eating Disorder report higher rates of trauma but show low levels of dissociative experiences. A subgroup of eating disordered patients reported pathological levels of dissociative experiences. 	21
Greenes, Fava, Cioffi, & Herzog (1993) USA	Explore the relationship between bulimia, depression and dissociation	Cross-sectional design	<p>32 participants recruited from a double-blind fluoxetine study</p> <p>8 met DSM-III-R criteria for Bulimia Nervosa and major depressive disorder</p>	<p>Two measures Hamilton Depression Rating Scale Dissociative Experiences Scale</p> <p>Mann-Whitney U test Wilcoxon Signed-rank test</p>	<ul style="list-style-type: none"> Presence of Bulimia Nervosa was not associated with higher dissociative scores. Individuals with a diagnosis of Bulimia Nervosa and depression reported significantly higher levels of 	19

			<p>9 met DSM-III-R criteria for Bulimia Nervosa (depression)</p> <p>7 met DSM-III-R criteria for Bulimia Nervosa (non-depression)</p> <p>8 females with depression</p>	t-test	<p>dissociation when compared to individuals with a diagnosis of Bulimia Nervosa without depression ($z = -2.38$, $p = 0.0172$).</p>	
<p>Hallings-Pott, Waller, Watson, & Scragg (2005)</p> <p>United Kingdom</p>	<p>Test whether subliminal abandonment threats result in enhanced state dissociation among women who use bulimia behaviour</p>	<p>Quasi-experimental design</p>	<p>24 females assessed for treatment in a specialist eating disorder service Mean age 31.2</p> <p>16 any eating disorder involving binge eating of Bulimia Nervosa</p> <p>4 Anorexia Nervosa (binge/purge type)</p> <p>2 Binge Eating Disorder</p> <p>2 Eating Disorder Not Otherwise Specified</p> <p>26 female age matched controls recruited through a nonstudent population through opportunity sampling Mean age 30.7</p>	<p>Four measures</p> <p>Eating Disorder Inventory</p> <p>Dissociative Experiences Scale II</p> <p>Clinician Administered Dissociative States Scale</p> <p>Hospital Anxiety and Depression Scale</p> <p>Task</p> <p>Presentation of threat cue (lonely) and neutral cue</p> <p>Analysis of variance</p>	<ul style="list-style-type: none"> • Subliminal abandonment threats result in enhanced state dissociation particularly derealisation. • Threat cue did not have a differential effect on mood across the two groups. • Individuals with an eating disorder diagnosis had significantly higher levels of state dissociation when compared to controls ($F_{1, 48} = 10.6$, $P < 0.002$). 	26
<p>Hartt & Waller (2002)</p> <p>United Kingdom</p>	<p>Examine the relationship between the severity of child abuse and bulimic symptomatology. Investigate the relationship of abuse with dissociation and core beliefs.</p>	<p>Cross-sectional design</p>	<p>23 females recruited from eating disorder services Mean age 29.4 years</p> <p>15 Bulimia Nervosa</p> <p>3 Binge Eating Disorder</p>	<p>Four measures:</p> <p>Child Abuse and Trauma Scale</p> <p>Young Schema Questionnaire</p> <p>Dissociative Experiences Scale II</p>	<ul style="list-style-type: none"> • A positive correlation was found between severity of abuse and severity of dissociative experiences ($r = 0.40$, $p < 0.05$). • This was due to positive correlations between dissociation and two 	33

			5 Anorexia Nervosa (binge/purge subtype)	Bulimic Investigatory Test – Edinburgh Pearson's correlation	subscales: neglect ($r = 0.46$, $p < 0.025$) and childhood sexual abuse ($r = 0.41$, $p < 0.05$).	
Herzog, Staley, Carmody, Robbins, & van der Kolk (1993) USA	To use advanced methodology to assess the prevalence of sexual trauma. To evaluate the usefulness of the semi-structured trauma interview.	Cross-sectional design	20 females were recruited from a bigger study Aged between 16 and 33 Mean age 23.8 years 4 Anorexia Nervosa 12 Bulimia Nervosa 4 Anorexia Nervosa and Bulimia Nervosa	Two measures: Traumatic Antecedents Interview Dissociative Experiences Scale Chi-squared test t-test	<ul style="list-style-type: none"> Individuals reporting childhood sexual abuse had significantly higher dissociative scores (Mean = 14.2) compared with those not reporting childhood sexual abuse (Mean = 5.83, $p < 0.01$). 	27
Katz & Gleaves (1996) USA	Examine the relationship between dissociative disorders and eating disorders. Control for depressive symptoms in examining the relationship between eating disorders and dissociative symptoms. Examine and compare how well individuals with dissociation and/or eating disorders could be classified using self-report measures.	Cross-sectional design	52 female participants Aged between 12 and 45 14 eating disorder without comorbid dissociative disorder (7 anorexia and 7 bulimia) 14 eating disorder with comorbid dissociative disorder 14 dissociative disorder without comorbid eating disorder 14 normal controls	Three measures Dissociative Experiences Scale Eating Disorder Inventory Eating Disorder and Dissociative Symptoms Inventory Analysis of variance Analysis of covariance Discriminant analysis	<ul style="list-style-type: none"> Individuals with an eating disorder diagnosis without a comorbid dissociative disorder did not differ from individuals with an eating disorder diagnosis and a comorbid dissociative disorder on dissociative measures. A group of dissociative like experiences are common among individuals with an eating disorder diagnosis. <p>All three objective assessments appeared to objectively classify individuals fairly well (Eating Disorder Inventory 80.0%, Dissociative Experiences Scale 70.9%,</p>	21

La Mela., Maglietta., Castellini., Amoroso., & Lucarelli (2010) Italy	Assess whether individuals with an eating disorder diagnosis have a higher level of dissociative experiences when compared with healthy controls and psychiatric controls with anxiety and mood disorders. Investigate the main effects of dissociative tendencies on measures of eating disorder symptoms specifically binge eating.	Cross-sectional design	Italy study 54 individuals with eating disorder recruited from two specialist units Mean age 31.1 years 9 Anorexia Nervosa 20 Bulimia Nervosa 25 Eating Disorder Not Otherwise Specified 56 individuals with anxiety or mood disorder from the same 2 units Mean age 33.8 years 39 controls recruited from acquaintances of the researchers Mean age 32.8 years	Four measures Structured Clinical Interview DSM-IV-I Eating disorder examination questionnaire Assessment of binge eating episodes using specific questions from SCID-I Dissociation questionnaire X ² t test Pearson's correlations Spearman's correlations Logistic regression analysis Multiple linear regression	<ul style="list-style-type: none"> Individuals with eating disorder showed higher levels of dissociation when compared to both control groups (<0.01). Frequency of binge eating episodes was significantly associated with the dissociative dimensions of identity confusion ($r = 0.425$, $p = 0.001$), loss of control ($r = 0.438$, $p = 0.001$) and amnesia ($r = 0.244$, $p = 0.027$). 	25
Léonard, Steiger, & Kao (2003) Canada	Assess the proportion of experiences of childhood abuse and later abuse in a sample of women with Bulimia Nervosa and women without an eating disorder. Explore the possible implications of repeated abuse for eating symptoms and associated psychopathologic traits.	Cross-sectional design	51 females recruited from an eating disorder service Mean age 24.71 years 39 Bulimia Nervosa (purging subtype) 6 Bulimia Nervosa (non- purging subtype) 5 subclinical Bulimia Nervosa (purging subtype)	Eight measures: Eating Disorder Examination- questionnaire Eating Attitudes Test Childhood Trauma Interview Trauma Assessment for Adults Dimensional Assessment of Personality Pathology Basic Questionnaire	<ul style="list-style-type: none"> Dissociation had significant group effects ($F_{4, 71} = 2.84$, $p < 0.05$). Dissociation appeared to be characteristic of individuals with a diagnosis of Bulimia Nervosa who had experiences of child and adult abuse. 	26

			<p>1 subclinical Bulimia Nervosa (non-purging subtype)</p> <p>25 female normal eaters recruited from universities and public advertisements</p> <p>Mean age 23.18 years</p>	<p>Centre for Epidemiological Studies Depression Scale</p> <p>Barratt Impulsivity scale</p> <p>Dissociative Experiences Scale</p> <p>Analysis of variance</p> <p>Multivariate analysis of variance</p> <p>Chi-square test</p>		
<p>Lyubomirsky, Casper, & Sousa (2001)</p> <p>USA</p>	<p>Examine the relationship between dissociative experiences and abnormal eating.</p> <p>Explore whether dissociative tendencies in non-eating disordered women would be related to abnormal eating attitudes and behaviour.</p> <p>Explore whether dissociative experiences prior to a binge episode along with negative affect may trigger binge eating.</p> <p>Investigate whether feelings of panic and dissociative states increase, decrease or stay the same with the progression of binge episodes</p>	Cross-sectional design	<p>61 female Bulimia Nervosa patients Aged between 16 and 54</p> <p>27 women reporting binge eating from a non-clinical sample</p> <p>92 women recruited from a university and the surrounding community Aged between 14 and 63</p>	<p>Six measures</p> <p>Eating Attitudes Test</p> <p>Negative Affect, dazed feelings and feelings of panic</p> <p>Dissociative Experiences Scale</p> <p>Unwanted sexual Experiences</p> <p>Beck Depression Inventory</p> <p>Impulsive Behaviours</p> <p>Pearson's zero order correlations</p> <p>Multiple regression analyses</p>	<ul style="list-style-type: none"> • A combination of negative affect and dissociative experiences before a binge was associated with the highest levels of abnormal eating attitudes and behaviours. • Individuals with a diagnosis of Bulimia Nervosa report significantly more dazed feelings during and after a binge than before a binge ($F_{1, 53} = 4.54$, $p < 0.04$). • Feelings of panic were less likely to be reported as a binge progressed. • Bulimia women were more likely to report dissociative states as a binge progressed when compared to occasional binge eaters. 	26

McCallum, Lock, Kulla & Rorty (1992) USA	Assess the presence of dissociative disorders in individuals with an eating disorder diagnosis. Explore the relationship between dissociative experiences, eating behaviour, history of abuse and self-harm.	Cross-sectional design	38 females recruited from a speciality inpatient unit and eating disorder services Aged between 19 and 35	Three measures: Dissociative Experiences Scale DSM-III-R algorithm for diagnosis of dissociative disorders Excerpts from Wyatt Sexuality Questionnaire	<ul style="list-style-type: none"> 4 individuals met the criteria for Multiple Personality Disorder, 2 met the criteria for Depersonalisation Disorder, 1 met criteria for Psychogenic Amnesia and 4 participants met the criteria for Dissociative Disorder Not Otherwise Specified. Levels of dissociation were significantly higher in individuals with a comorbid dissociative disorder on absorption (Mean = 34.24, $p < 0.01$) and depersonalisation (Mean = 26.36, $p < 0.03$). Individuals with a comorbid dissociative disorder reported significantly higher levels of dissociative experiences in relation to eating behaviour ($t = -2.58$, $p < 0.05$). Self-harm was more likely to be reported by individuals with a comorbid dissociative disorder. Depersonalisation was significantly related to self-harm ($p < 0.02$). 	18
Muehlenkamp, Claes, Smits, Peat, & Vandereycken (2011)	Examine an integrated model of the relationship between childhood trauma, low self-esteem, affective pathology,	Cross-sectional design	422 female patients in a specialised inpatient unit for eating disorders Mean age 21.6	Seven measures Dutch Traumatic Experiences Checklist	<ul style="list-style-type: none"> Significant pathways were found from childhood abuse (0.17, $t = 3.71$, $p < 0.01$) and low 	26

Belgium	dissociation, body dissatisfaction and non-suicidal self-injury		140 Anorexia Nervosa (restricting type) 138 Anorexia Nervosa (binge/purge type) 15 Bulimia Nervosa (non-purging type) 109 Bulimia Nervosa (purging type) 20 Eating Disorder Not Otherwise Specified	Dutch Symptom Checklist-90 Neuroticism facet subscale, anxiety and depression of the NEO-PI-R Ineffectiveness subscale of Eating Disorder Inventory-II Dissociation Questionnaire Body Attitude Test Self-Injury Questionnaire Structural equation modelling Item covariance matrix	<ul style="list-style-type: none"> self-esteem (0.72, $t = 14.42$, $p < 0.01$ to eating disorders. Significant pathways were found from eating disorders (0.76, $t = 15.89$, $p < 0.01$) to dissociation to non-suicidal self-injury (0.32, $t = 5.75$, $p < 0.01$). The relationship between eating disorders and non-suicidal self-injury appeared to be mediated by dissociation. 	
Nagata, Kiriike, Iketani, Kawarada, & Tanaka (1999) Japan	Study the prevalence of sexual and physical abuse histories in Japanese individuals with an eating disorder diagnosis. Explore the relationship between traumatic events and clinical features such as dissociation and impulsive behaviour.	Cross-sectional design	136 females recruited from a hospital 33 Anorexia Nervosa (restricting type) 40 Anorexia Nervosa (binge/purging type) 63 Bulimia Nervosa (purging type) 99 female nursing students	Four measures Physical and Sexual Abuse Questionnaire Dissociative Experiences Scale Eating Disorder Inventory Rosenberg Self-esteem Scale Analysis of variance Scheffé's test Chi-square test	<ul style="list-style-type: none"> No significant difference in the prevalence of sexual abuse among the four groups. No significant difference of dissociation and self-esteem was found between individuals with bulimia and a history of sexual abuse compared with individuals with bulimia and no sexual abuse history. Physical punishment histories tended to be more frequent in Japanese patients with Anorexia Nervosa binge-purging type and Bulimia Nervosa than in patients with Anorexia Nervosa 	27

					(restricting type) and controls.	
Noma, Uwatoko, Ono, Miyagi, & Murai (2015) Japan	Investigate the features associated with self-harming behaviours in outpatients with an eating disorder.	Cross-sectional design	76 female outpatients from a hospital Aged between 16 and 56 Mean age 30.6 23 Anorexia Nervosa (restricting subtype) 20 Anorexia Nervosa (binge/purge subtype) 13 Bulimia Nervosa (purging subtype) 1 Bulimia Nervosa (non-purging subtype) 19 Eating Disorders Not Otherwise Specified	Five measures: Eating Disorder Inventory Bulimic Investigatory Test – Edinburgh Dissociative Experiences Scale Relationship Questionnaire Questionnaire designed by the researchers to assess self-harming behaviour Univariate analysis Logistic regression Chi-square Test Analysis of variance Tukey test t-test U-test	<ul style="list-style-type: none"> Levels of dissociation were significantly higher in individuals with an eating disorder diagnosis and comorbid disorders compared to individuals with an eating disorder diagnosis and no comorbidity (Mean = 41.8, $p < 0.001$). Dissociation was related to recent non-suicidal self-injurious behaviour. 	28
Oliosi & Grave (2003) Italy	Study the presence of eating disorders and psychiatric symptoms among the three subtypes of Anorexia Nervosa. To investigate the differences in dissociation and suicide attempts between these three subtypes.	Cross-sectional design	118 females treated at an eating disorders inpatient unit 40 Anorexia Nervosa (restricting subtype) Mean age 21.9 years 38 Anorexia Nervosa (purging subtype) Mean age 27.0 years 40 Anorexia Nervosa (binge/purge subtype) Mean age 25.0 years	Three measures: Eating Disorder Inventory Symptom Checklist-90 Dissociation Questionnaire Analysis of variance Scheffé's test Chi-square test	<ul style="list-style-type: none"> Levels of dissociation were significantly higher in individuals with a diagnosis of Anorexia Nervosa purging subtype compared to individuals with a diagnosis of Anorexia Nervosa restricting subtype ($p < 0.01$). Levels of dissociation were significantly higher in individuals with a diagnosis of Anorexia 	29

					Nervosa bingeing subtype compared to individuals with a diagnosis of Anorexia Nervosa restricting subtype ($p < 0.05$).	
Paul, Schroeter, Dahme, & Nutzinger (2002) Germany	Assess lifetime and current occurrence of self-injurious behaviour in individuals with an eating disorder diagnosis. Investigate the importance of traumatic experiences, dissociation, impulsivity and obsessive compulsive behaviour on aspects of self-injurious behaviour such as severity and frequency.	Cross-sectional design	376 female inpatients Mean age 24.3 years 59 Anorexia Nervosa (restricting subtype) 60 Anorexia Nervosa (purging subtype) 133 Bulimia Nervosa (purging subtype) 4 Bulimia Nervosa (non-purging subtype) 120 Eating Disorder Not Otherwise Specified	Eight measures: Sociodemographic questionnaire designed by the researchers Eating Disorders Inventory Eating Disorders Questionnaire Questionnaire on Self-injurious Behaviour Barratt Impulsiveness Scale Yale-Brown Obsessive-Compulsive Scale Dissociative Experiences Scale Traumatic Life Events Questionnaire Multivariate analysis of variance	<ul style="list-style-type: none"> Individuals with an eating disorder diagnosis who engaged in self-injurious behaviour reported significantly higher levels of imaginative experience ($F_{1,350} = 14.07$, $p < 0.001$) and depersonalisation/derealisation ($F_{1,350} = 13.51$, $p < 0.001$). Individuals with bulimia scored significantly higher on imaginative experiences than individuals with a diagnosis of Anorexia Nervosa restricting subtype ($F_{3,350} = 4.15$, $p < 0.006$). 	24
Schumaker, Warren, Carr, Schreiber, & Jackson (1995)*** Australia	Assess dissociation and depression in a sample of eating disordered individuals	Cross-sectional design	44 female inpatients in an eating disorder unit Aged between 18 and 36 18 Bulimia Nervosa 26 Anorexia Nervosa Control group 31 university females	Two Questionnaires Questionnaire of Experiences of Dissociation Beck Depression Inventory Kruskall-Wallis one way Analysis of variance Mann-Whitney U test Spearman's correlation	<ul style="list-style-type: none"> Levels of dissociation and depression were higher among individuals with an eating disorder diagnosis when compared to controls. Moderate positive correlation between depression and dissociation in individuals with a diagnosis of 	19

			Aged between 17 and 49		<ul style="list-style-type: none"> Anorexia Nervosa ($r = 0.62, p < 0.01$). Moderate positive correlation between depression and dissociation in individuals with a diagnosis of Bulimia Nervosa ($r = 0.59, p < 0.05$). No significant correlation between dissociation and depression was found in the control group, 	
Schumaker, Warren, Schreiber, & Jackson (1994) ^{***} Australia	Assess levels of dissociation in eating disordered and non-eating disordered groups	Cross-sectional design	44 female inpatients of an eating disorder unit Aged between 18 and 36 26 Anorexia Nervosa 18 Bulimia Nervosa Controls were 22 females predominantly university students Aged between 17 and 49	Questionnaire of Experiences of Dissociation Kruskal-Wallis one way Analysis of variance Mann-Whitney U test	<ul style="list-style-type: none"> Significant difference between groups. Individuals with eating disorder had higher dissociative scores than controls ($U = 219, p < 0.01$). Individuals with a diagnosis of Anorexia Nervosa reported significantly higher levels of dissociation when compared to controls ($U = 128, p < 0.01$). Individuals with a diagnosis of Bulimia Nervosa reported significantly higher levels of dissociation when compared to controls ($U = 91, p < 0.01$). No significant difference in dissociative scores was found between individuals with a 	25

					diagnosis of Anorexia Nervosa and individuals with a diagnosis of Bulimia Nervosa.	
Vanderlinden, Spinhoven, Vandereycken, & van Dyck (1995) Belgium	Investigate experiences of dissociation in individuals with an eating disorder diagnosis compared with normal controls.	Cross-sectional design	53 inpatients 2 males and 51 females Mean age 24 years 18 Anorexia Nervosa (restricting subtype) 17 Anorexia Nervosa (binge/purge subtype) 18 Bulimia Nervosa	Four measures: Stanford Hypnotic Clinical Scale Dutch Phenomenology of Consciousness Inventory Dutch Resistance to Hypnosis Scale Dissociation Questionnaire Analysis of variance Chi-square test Multivariate analysis of covariance t-test	<ul style="list-style-type: none"> • A significant overall between group variance of levels of dissociation was found between the three subgroups of eating disorders ($F_{2, 50} = 2.54$, $p < 0.05$). • A significant between group difference on subscale loss of control ($F_{2, 50} = 5.88$, $p < 0.005$). • Individuals with a diagnosis of Anorexia Nervosa binge/purge subtype and individuals with a diagnosis of Bulimia Nervosa reported significantly higher scores on the loss of control subscale when compared to individuals with a diagnosis of Anorexia Nervosa restricting subtype ($p < 0.05$). 	26
Vanderlinden, Vandereycken, Van Dyck, & Vertommen (1993) Belgium	Study the relationship between trauma and dissociation in individuals with an eating disorder diagnosis.	Cross-sectional design	98 patients from an eating disorders inpatient unit 2 males and 96 females Aged between 14 and 42 Mean age 24.3 years	Two measures: Dissociation Questionnaire Questionnaire of Sexual Experiences in the Past Analysis of variance Scheffé's test	<ul style="list-style-type: none"> • Individuals with an eating disorder diagnosis reported significantly higher levels of dissociation when compared to controls ($p < 0.001$). • Individuals with an eating disorder diagnosis, when 	18

			<p>34 Anorexia Nervosa (restrictive subtype) 24 Anorexia Nervosa (binge/purge subtype) 28 Bulimia Nervosa</p> <p>66 females selected from a random sampling from the general population register Aged between 15 and 37 Mean age 25.04</p>		<p>compared to controls, scored significantly higher on identity confusion ($p<0.0001$), loss of control ($p<0.0001$), absorption ($p<0.0001$) and amnesia ($p<0.05$).</p> <ul style="list-style-type: none"> Individuals with a diagnosis of Anorexia Nervosa binge/purge subtype and individuals with a diagnosis of Bulimia Nervosa reported higher scores on the loss of control and amnesia subscale when compared to individuals with a diagnosis of Anorexia Nervosa restrictive subtype ($p<0.05$). 	
<p>Waller et al. (2003) United Kingdom</p>	Determine the links between different forms of dissociation and eating psychopathology	Cross-sectional Comparative design	<p>131 female patients referred to eating disorder services</p> <p>21 Anorexia Nervosa (restricting type) Mean age 25.7 40 Anorexia Nervosa (binge/purge type) Mean age 28.0 70 Bulimia Nervosa Mean age 26.9</p> <p>75 female volunteers recruited from undergraduates and non-students Mean age 20.1</p>	<p>Three measures Dissociative Experiences Scale II Somatoform Dissociation Questionnaire Bulimia Investigatory Test – Edinburgh</p> <p>Analysis of variance Post hoc Tukey test t-test Pearson's correlation Multiple regression analysis</p>	<ul style="list-style-type: none"> Somatoform dissociation was significantly higher in individuals who abused laxatives ($t = 2.21$, $p<0.04$), diuretics ($t = 2.19$, $p<0.04$) and diet pills ($t = 2.64$, $p<0.01$) Excessive exercise was associated with psychological dissociation ($t = 2.55$, $p<0.02$) and somatoform dissociation ($t = 3.43$, $p<0.001$). 	26

Note: * same study written in two articles, **same study written in two articles, *** same study written in two articles

1.4.2.2. Methodologies

A number of different methodologies were utilised to investigate the aims of the studies. Thirty-three of the studies utilised quantitative methodologies. Thirty-two of those adopted a cross-sectional design. Two of these thirty-two studies employed meditation analysis, while one study used a naturalistic design where self-monitoring diaries were used (Engelberg et al., 2007). One study used a quasi-experimental design with aged matched controls (Hallings-Pott et al., 2005). Finally, one study (Espeset et al., 2011) was qualitative in nature.

Fourteen of the studies measured dissociation using the Dissociative Experiences Scale (DES), three of these studies used the second version of the scale and one the adolescent version. One study utilised both the DES and the Dissociative Disorders Interview Schedule (DDIS). Eleven studies used the Dissociation Questionnaire (DIS-Q) and two used the Questionnaire of Experiences of Dissociation (QED). One study used the Eating Disorder and Dissociative Symptoms Inventory which measures dissociative symptoms specific to eating disorders. One study (Waller et al., 2003) used the Somatoform Dissociation Questionnaire (SDQ) alongside the DES to assess somatoform dissociation. One study (Hallings-Pott et al., 2005) measured state dissociation with the Clinician Administered Dissociative States Scale (CADSS) alongside the DES. Gleaves and Eberenz (1995b) administered the dissociation scale from the Trauma Symptom Checklist (TSC) alongside the DES. One study utilised three items from the Peritraumatic Dissociation Experiences Scale (PDES).

Each study employed more than one method of data analysis, including analysis of variance, multivariate analysis of variance and analysis of co-variance. Studies exploring differences between groups utilised t-test, Wilcoxon signed-rank test, Mann-Whitney U test, Chi-squared test and Kruskal Wallis test. Studies exploring associations between eating disorders and dissociation used Pearson's correlation or Spearman's correlation. Four studies used multiple regression to analyse data and one used both multiple and

logistic regression. One study analysed its data using hierarchical linear modelling to assess the effects of dissociation and negative affect on bingeing episodes (Engelberg et al., 2007). One study employed structural equation modelling and item covariance matrix in order to assess an integrated model of childhood trauma, eating disorders and non-suicidal self-injury (Muehlenkamp et al., 2011). The only qualitative study (Espeset et al., 2011) utilised grounded theory.

All these studies have used a range of methodologies to explore the various roles that dissociation may have within eating disorders.

1.4.2.3. Sample and recruitment

The studies were conducted in a number of countries using different recruitment methods. Seven of the studies were conducted in the United States of America (USA), six in the United Kingdom (UK), five in Italy, five in Belgium, three in Japan, three in Australia, two in Canada and one each in Spain, Germany and Norway. Of the thirty-four studies, twelve recruited samples from eating disorder services, thirteen recruited from specialist eating disorder inpatient units, three recruited from inpatient units in hospitals, three recruited from outpatient services, two recruited from another existing study and one study did not specify where the clinic sample was recruited from (Beato et al., 2003).

The samples of fourteen of the studies included only individuals with Anorexia Nervosa and Bulimia Nervosa. Seven studies include individuals with Anorexia Nervosa, Bulimia Nervosa and eating disorders not otherwise specified (EDNOS). Three studies only include Bulimia Nervosa, three only included Anorexia Nervosa and one study only included Binge Eating Disorder. One study's clinical sample included Bulimia Nervosa and EDNOS. Three studies included Anorexia Nervosa, Bulimia Nervosa and Binge Eating Disorder in their clinical sample. Only one study included all four types of eating disorder diagnoses (Anorexia Nervosa, Bulimia Nervosa, Binge Eating Disorder and

EDNOS). Finally, one study did not specify the eating disorder diagnoses of its clinical sample.

Eight studies recruited students as the control sample. Two studies had a mix of students and non-students in the control sample. Three studies had a non-student control group, one recruited through opportunity sampling, one through advertisements in the community and the other through acquaintances of the researchers. Four studies had clinical comparison groups; one study recruited individuals with anxiety and depression from an inpatient unit, another study included individuals with dissociative disorders, one study recruited individuals with depression from a medical research trial and one study included individuals with a diagnosis of Schizophrenia recruited from an inpatient unit. Two studies had a student control group and a mixed clinical group. One study had a non-student control group and clinical control group. Nineteen studies did not have a control group.

1.4.3. Eating disorders and dissociation: A critical evaluation of the evidence

The papers identified explored various roles that dissociation can play within eating disorders. The following sections will firstly consider if there is an association between eating disorders and dissociation. It will then go on to explore the possible role of dissociation within eating disorders. These include the role of dissociation between trauma and eating disorders, self-harm and eating disorders, emotions and eating disorders, and dissociation in eating disorder symptomatology.

1.4.3.1. Association between eating disorders and dissociation

When considering the role of dissociation within eating disorders it is important to firstly consider if there is an association between dissociation and eating disorders. Four of the studies (Grave, Oliosi, et al., 1996; Grave et al., 1997; Schumaker et al., 1994;

Vanderlinden et al., 1995) explored the relationship between eating disorders and dissociation. Three of the studies found a significant difference in scores between individuals with an eating disorder diagnosis and control participants, with individuals with an eating disorder diagnosis reporting higher scores of dissociation. However, most of the studies tended to consider anorexia and bulimia when looking at dissociation and eating disorders and very few included individuals with Binge Eating Disorder and EDNOS.

On the other hand, most of these studies were conducted before the DSM 5 (American Psychiatric Association, 2013) was published so at that time Binge Eating Disorder would have been classified within EDNOS. All of these studies also recruited student samples as control participants. One study (Grave et al., 1997) considered dissociation within Binge Eating Disorders and found no significant difference between individuals with a diagnosis of Binge Eating Disorders who were obese and obese individuals without Binge Eating Disorders. Although no significant difference was found between these two groups, all participants were recruited from an inpatient unit and there were no non-clinical control participants, suggesting that there may be higher levels of dissociation within clinical samples of obese individuals. A further limitation of the present study was that it scored at the mid-point on the quality assessment framework due to a lack of a comprehensive review of the literature and missing information on the research process.

Three studies (Berger et al., 1994; Katz & Gleaves, 1996; McCallum et al., 1992) considered the prevalence of dissociative disorders within eating disorders and found that individuals with an eating disorder diagnosis and a comorbid dissociative disorder had significantly higher dissociative scores compared to individuals with an eating disorder diagnosis without a comorbid dissociative disorder. This suggests that dissociation within eating disorders may be part of a comorbid dissociative disorder rather than a distinct feature of eating disorders. For example, Katz and Gleaves (1996) recruited control participants and discovered that when compared to individuals with an

eating disorder diagnosis, they did not significantly differ on scores of dissociation. However, the present study had a very small sample size of fourteen participants per group and these findings should therefore be interpreted with caution.

In contrast, McCallum et al. (1992) found that individuals who had an eating disorder without a comorbid dissociative disorder reported significantly higher dissociative scores in relation to eating behaviour when compared to individuals with an eating disorder diagnosis and comorbid dissociative disorder. This suggests that dissociation may play a role within the symptomology of eating disorders. However, as dissociative disorders were diagnosed by means of clinical interview and inter-rater reliability was not investigated, there is some uncertainty regarding whether the comorbid diagnoses of dissociative disorders are accurate. Additionally, the present study scored at the mid-point on the quality assessment framework due to the method of data collection and lack of information on the method of data analysis, making it difficult to assess how significant these results are.

Overall, these studies suggest that there is an association between dissociation and eating disorders. However, consideration also needs to be given to co-morbid dissociative disorders. The following studies have explored the possible roles that dissociation may have within eating disorders.

1.4.3.2. The role of dissociation in trauma and eating disorders

One hypothesis on the role of dissociation in eating disorders is that it may act as a mediating factor between traumatic experiences and the eating disorder. Eight studies investigated the role of dissociation in the relationship between eating disorders and trauma but only one study explored if dissociation acts as a mediator. Everill, Waller and Macdonald (1995b) considered whether dissociation acts as a mediating factor specifically between sexual abuse and bulimic symptoms in eating disorders. They found that higher levels of dissociation were associated with greater frequency of

bingeing. There was no significant difference between individuals who reported experiences of abuse and those who did not in frequency of bingeing when dissociation was partialled out, suggesting that dissociation acts as a mediating factor between sexual abuse and the bingeing symptoms of eating disorders.

Restricting the study to a focus on sexual abuse only can be justified as four of the studies (Brown et al., 1999; Herzog et al., 1993; Léonard et al., 2003; Vanderlinden, Vandereycken, et al., 1993) have found that individuals with an eating disorder diagnosis who have experienced sexual abuse report higher levels of dissociation when compared to individuals diagnosed with eating disorders who have not experienced abuse. However, these results need to be interpreted with caution as three of the studies (Herzog et al., 1993; Léonard et al., 2003; Vanderlinden, Vandereycken, et al., 1993) had small sample sizes ranging from ten to thirteen participants who had experienced sexual abuse and had small samples for groups of individuals who had experienced other forms of abuse, which could account for the lack of significance in scores of dissociation. They also use self-report methods for assessing childhood abuse and one study (Vanderlinden, Vandereycken, et al., 1993) scored 18 on the quality assessment framework as it did not provide a clear rationale and used an unpublished measure to assess childhood trauma bringing to question the reliability and validity of the data collected.

In addition, Grave, Rigamonti, Todisco and Oliosi (1996) found no significant differences in scores of dissociation between individuals with an eating disorder diagnosis who have experienced sexual abuse as compared to those who have not. Similarly, Nagata, Kiriike, Iketani, Kawarada and Tanaka (1999) found no significant difference in dissociation scores for sexual abuse but they did find a significant difference when exploring physical abuse. Hartt and Waller (2002) found significant differences in scores of dissociation in individuals with an eating disorder diagnosis who have experienced neglect when compared to individuals with an eating disorder diagnosis who have not

experienced neglect. Once again these results need to be interpreted with caution as all three studies had small group sizes for the different categories of abuse. However, all of these studies scored above the mid-point on the quality assessment framework with two of the studies using validated measures of childhood trauma. One study (Hartt & Waller, 2002) scored 33 on the quality assessment framework, suggesting that it is important to consider the relation of other forms of abuse to eating disorders.

Everill et al. (1995b) also restricted their study to focus on individuals with a diagnosis of bulimia and more specifically looking at the role of dissociation in the bingeing symptoms of bulimia. This restriction can be seen as reasonable as three studies (Grave, Rigamonti, et al., 1996; Olisi & Grave, 2003; Vanderlinden, Vandereycken, et al., 1993) have found high rates of experiences of abuse in individuals with a diagnosis of bulimia. Additionally, Léonard et al. (2003) found significantly higher scores of dissociation in individuals with a diagnosis of bulimia who have experienced abuse when compared to control participants. However, Hartt and Waller (2002) found no significant correlation between experiences of sexual abuse and bulimic symptomology in individuals with a diagnosis of bulimia and found a positive trend between trauma and vomiting behaviours, suggesting that trauma may be more strongly related to purging behaviours rather than bingeing behaviours. Nagata et al. (1999) also discovered no significant differences in experiences of abuse in individuals with bulimia when compared to control participants.

Comparing these studies along with the rates of abuse within eating disorders can be difficult as they have used a variety of methods to assess for history of abuse. In two studies (Everill et al., 1995b; Grave, Rigamonti, et al., 1996) researchers asked about experiences of abuse within the initial clinical interviews. Similarly, Vanderlinden et al. (1993) asked about experiences of abuse within a clinical interview and asked participants to complete a questionnaire. Five of the studies (Brown et al., 1999; Hartt & Waller., 2002; Herzog et al., 1993; Léonard et al., 2003; Nagata et al., 1999) utilised self-

report questionnaires. The use of these various methods of measuring trauma and abuse suggests that these studies employed different definitions of abuse which could have impacted on the reports of abuse. In addition, the use of self-report measures when assessing for experiences of abuse can result in under-reporting of such experiences by participants.

As there is only one study exploring the mediating role of dissociation in the relationship between eating disorders and trauma, it is unclear what role dissociation plays in this relationship. Additionally, as the study restricted the exploration to a specific type of abuse and a particular symptom of eating disorders there still remains uncertainty about the role that dissociation may play in the relationship between eating disorders and other forms of abuse.

1.4.3.3. The role of dissociation in eating disorders and self-harm

In considering the role of dissociation in the relationship between eating disorders and trauma, it has been suggested that dissociation may be a way of managing trauma and that self-harm is a way of coping with dissociative experiences. Claes and Vandereycken (2007) investigate these relationships using validated measures and found that there was a high probability of self-injurious behaviour in individuals with an eating disorder diagnosis who have had experiences of trauma. In particular, individuals who self-injured and experienced sexual abuse scored significantly higher on identity confusion, amnesia and absorption subscales of dissociation when compared to individuals who experienced sexual abuse and do not self-injure.

However, there were small numbers of participants who engaged in self-injurious behaviour who had experienced particular types of abuse. For example, there were only fourteen participants who experienced physical abuse and engaged in self-injurious behaviour. Additionally, there was no control group to compare these results and a large number of measures were utilised with no correction made to the probability in order to

avoid a type-1 error and if this correction was made it could cause their results to be insignificant. Muehlenkamp et al. (2011) investigated a conceptual model linking childhood trauma, eating disorders, dissociation and non-suicidal self-injury with a larger sample. They found a significant pathway from childhood abuse and low self-esteem to eating disorders and from eating disorders to dissociation to self-harm, suggesting that trauma and dissociation may make individuals with an eating disorder diagnosis more vulnerable to non-suicidal self-injury.

The hypothesis that self-harm may act as a way of coping with dissociative experiences has been investigated by one study (Noma et al., 2015). They found that dissociation was related to both recent and past incidents of non-suicidal self-injury, arguing that this may be due to self-injury being used as a mechanism for coping with dissociative states. Similarly, Demitrack et al. (1990) found that individuals with an eating disorder diagnosis who scored above the normal range on dissociation had a significantly higher frequency of self-harm and suicidal attempts when compared to individuals with an eating disorder diagnosis who scored within the normal range of dissociation. Two other studies (Claes et al., 2003; Paul et al., 2002) have also found significantly higher levels of dissociation in individuals with an eating disorder diagnosis who self-harm when compared to individuals who do not self-injure.

Demitrack et al. (1990) also found no significant difference in impulsivity or illness severity when comparing individuals with a diagnosis of eating disorders who engage in self-injurious behaviours with those who do not, suggesting that self-injurious behaviours may be a way of adapting to dissociative states. However, compared to the other studies, the present study scored lower on the quality assessment framework and did not use a validated measure for self-injurious behaviour.

In addition, Noma et al. (2015) found that dissociative scores were higher in individuals with an eating disorder diagnosis with a co-morbid disorder when compared to

individuals with an eating disorder diagnosis, suggesting that dissociation may be related to these co-morbid disorders. The three other studies (Claes et al., 2003; Demitrack et al., 1990; Paul et al., 2002) did not report on whether their sample had co-morbid disorders and this may have been a confounding variable. For example, Claes et al. (2003) reported that individuals with an eating disorder diagnosis who engaged in self-injurious behaviour reported higher levels of anxiety and depression.

These studies suggest that dissociation may play a role within the relationship of eating disorders and self-harm. However, consideration needs to be given to the impact of comorbid disorders and the role that anxiety and depression may have in this relationship.

1.4.3.4. The role of dissociation in the relationship between eating disorders and emotion

When taking into consideration the impact of comorbid disorders in the relationship between eating disorders and dissociation Gleaves and Ebernez (1995b) argue that dissociation may not be a core symptom of eating disorders. They found severity of bulimic symptoms to be uncorrelated with dissociation and severity of anorexic symptoms were uncorrelated to dissociation once anxiety and depression were accounted for. However, due to the correlational nature of the study it cannot be interpreted to mean that dissociation does not play a role within eating disorders.

Two other studies (Greenes et al., 1993; Schumaker et al., 1995) have argued that dissociation may be related to symptoms of depression in individuals with bulimia. Greenes et al. (1993) discovered no differences in scores of dissociation between individuals with a diagnosis of bulimia and individuals with a diagnosis of depression but found that individuals with a diagnosis of bulimia and depressive symptoms scored higher than individuals with a diagnosis of bulimia and no depressive symptoms.

However, their sample sizes were small, with a range of seven to nine participants in each group, and they did not include a non-clinical control group within their study.

Schumaker et al. (1995) similarly explored the relationships between depression and dissociation in eating disorders, finding a moderate correlation between dissociation and depression in individuals with an eating disorder diagnosis which was not found in the control group. This suggests that dissociation and depression may be linked within eating disorders; however, it is important to consider that the control participants were a student population and there were no clinical controls. Additionally, both these studies scored nineteen on the quality assessment framework due to limited review of the literature, missing information on the methodology and limited information on the results of the study.

When exploring the role of dissociation in the relationship between eating disorders and comorbid psychological symptoms Farrington et al. (2002) found that scores of dissociation did not differ between adolescents with anorexia compared to a clinical and control sample. However, the mixed clinical group included individuals with a diagnosis of bulimia, which previous studies have argued can report significantly higher levels of dissociation (Demitrack et al., 1990; Schumaker et al., 1995; Waller et al., 2003). On the other hand, when exploring dissociation within individuals with a diagnosis of anorexia Farrington et al. (2002) discovered that scores of dissociation positively correlated with hostility and interpersonal sensitivity, suggesting that dissociation within Anorexia Nervosa is focused on the reduction of affect, particularly anger and interpersonal affect. Compared to the other studies, the present study also scored better on the quality assessment framework.

In an experimental study, Hallings-Pott et al. (2005) showed individuals with a diagnosis of any eating disorder involving binge eating and control participants lonely cues while observers measured levels of state dissociation. They found that, when shown lonely

cues, individuals with an eating disorder diagnosis did not experience an increase in anxiety or depression in relation to the cues but experienced significantly higher levels of state dissociation, in particular derealisation, when compared to neutral cues. There was no such difference in the non-clinical group highlighting how dissociation may play a role in managing interpersonal affect within eating disorders. However, the data was analysed using parametric analysis even though the data was not normally distributed and inter-rater reliability was not reported, suggesting that the findings need to be interpreted with caution.

Overall, when considering the role of dissociation in eating disorders it is important to consider the impact that other psychological symptoms may play in this relationship. However, it appears that in some way dissociation may play a role in managing particular affect within eating disorders.

1.4.3.5. The role of dissociation in eating disorder symptomatology

In addition to dissociation potentially being used as a strategy by individuals with an eating disorder diagnosis to reduce affect, it can also impact upon the symptoms within eating disorders. Dissociation has been considered to play a role within the bingeing symptoms of eating disorders and two studies (Everill et al., 1995a; La Mela et al., 2010) have found significant correlations between bingeing behaviour and scores of dissociation. However, frequency of bingeing episodes in these studies may not be accurate as self-report methods were used to identify the number of bingeing episodes.

Everill et al. (1995a) conducted a further multiple regression analysis and found dissociation accounted for 39% of the variance in bingeing frequencies, suggesting that dissociation plays a specific role in bingeing behaviour. Similarly, Lyubomirsky, Sousa and Casper (2001) found that individuals with an eating disorder diagnosis reported experiences of dissociation during and after bingeing when compared to a non-clinical

sample who engage in occasional bingeing behaviour but these results need to be considered with caution as no standardised measure of dissociation was used.

Engelberg et al. (2007) employed an ecological momentary assessment paradigm to monitor dissociation prior to and during bingeing episodes. They found that the presence of dissociation prior to bingeing increased the probability that individuals would engage in bingeing behaviour. This suggests that dissociation may play a role in the onset of bingeing behaviour. However, as dissociation was measured with the use of only three adapted questions it is difficult to identify whether the experiences reported prior to a binge were dissociative in nature. In contrast to these studies, Waller et al. (2003) found significantly higher levels of psychological dissociation in individual with an eating disorder who engage in purging behaviour and significantly higher levels of somatoform and psychological dissociation in relation to excessive exercise, suggesting that dissociation plays more of a role in purging and restrictive behaviours than it does in bingeing behaviours.

Studies have focused on bingeing symptoms of eating disorders but it appears that it may be beneficial to explore other symptoms of eating disorders such as body image disturbance and purging symptoms further. Only two studies (Beato et al., 2003; Espeset et al., 2011) have explored the role of dissociation in symptoms of eating disorders and these studies have focused on body image disturbance. Beato et al. (2003) found significant correlations between dissociation and concern about body shape in individuals with an eating disorder diagnosis, with dissociation accounting for 15.3% of the variance of body shape concerns. No such relationship was found in control participants, suggesting that dissociation may play a role in body image disturbance in eating disorders.

However, the control group within the present study consisted of nursing students and as the study was correlational, it is difficult to know what role dissociation plays in this

relationship. Espeset et al. (2011) utilised qualitative methods to explore body image disturbance in individuals with a diagnosis of Anorexia Nervosa. Using grounded theory methodology, one of the phenotypes identified was dissociation between subjective and objective reality which encompassed the process by which individuals cope with the conflicting realities of their body image by splitting their thought process through depersonalisation or derealisation. This process may in part explain why individuals with an eating disorder diagnosis who are severely underweight are ambivalent to weight gain and behavioural changes.

Overall, these studies suggest that dissociation may play a role within eating disorder symptomology, particularly the binge-purge cycle and body image disturbance. However, more research is needed to consider the role dissociation may play in other eating disorders symptomology.

1.5. Discussion

1.5.1. Summary of key findings

The studies reviewed here indicate that there are a number of roles that dissociation may have in eating disorder presentations. Firstly, findings from a number of the studies (Everill et al., 1995b; Hartt & Waller, 2002; Nagata et al., 1999) suggest that dissociation may be a coping strategy for managing traumatic experiences in people with eating disorders. As previously noted, it has been proposed elsewhere that some of the behaviours in eating disorders may serve to manage the feelings which arise from dissociative experiences (Everill & Waller, 1995).

A second finding from the present literature review is that individuals with an eating disorder diagnosis and higher levels of dissociation are more likely to self-harm (Claes & Vandereycken, 2007; Muehlenkamp et al., 2011). It has been purported that self-harm

within eating disorders may act as a means of removing oneself from dissociative states and their emotional impact (Franzke et al., 2015; Yates et al., 2008).

A further finding in two of the studies reviewed (Farrington et al., 2002; Hallings-Pott et al., 2005) is that dissociation can be seen as a means of managing certain affective states (e.g. anger) within eating disorders. It is thought that dissociation may be the mechanism by which individuals disconnect from intolerable feelings which are then projected onto the self through eating disorder symptoms (Lightstone, 2004).

Finally, findings from the only qualitative study reviewed here suggest that splitting off thought processes on actual and imagined body image may occur. This appears to fit with work by Zerbe (1993), which suggests that eating disorders be seen as the hidden expression of self, dissociated from other parts of the self.

However, these findings need to be considered in light of methodological limitations of the evidence.

1.5.2. Limitations of methodological factors

1.5.2.1. Limitations of sample and recruitment

When considering the validity of the results from the studies reviewed here, an important factor is the sample. The majority of the studies had small sample sizes making it difficult to generalise their findings. This also means that their results need to be interpreted with caution as it could relate only to a small group of individuals. Additionally, the choice of students as a control sample is not always appropriate, particularly when the sample of individuals with an eating disorder diagnosis is older in age (Grave, Oliosi, et al., 1996; Grave, Rigamonti, et al., 1996; Waller et al., 2003). Another limitation is the use of inpatients to represent individuals with a diagnosis of an eating disorder. Firstly, if comorbid diagnoses are not taken into consideration this can be a confounding variable.

Secondly, the role that dissociation plays may vary between individuals within inpatient settings and those accessing eating disorder services.

The majority of the participants in the studies reviewed were aged eighteen years and above. The few studies which included participants under the age of eighteen years grouped these participants together which could have impacted on reported levels of dissociation as younger participants may not be aware of these experiences. Only one study explored dissociation within adolescents with a diagnosis of Anorexia Nervosa. This is important in considering if dissociation plays a role in the development of eating disorders as such disorders tend to begin in adolescence. It may have been interesting to explore if there are differences in reported levels of dissociation between adolescents and adults and to also explore whether adolescents have similar or different subjective experiences of dissociation.

Finally, none of the reviewed studies reported the ethnic diversity of their sample. This needs to be more clearly reported in future studies as experiences of dissociation can vary between ethnic groups (Douglas, 2009; Seedat, Stein, & Forde, 2003).

1.5.2.2. Limitations of method and design

The reviewed studies' procedures for investigating the role of dissociation within eating disorders had some variance. The cross-sectional nature of the studies makes it impossible to make causal inferences and it is therefore difficult to know if dissociation plays a role in the development of eating disorders or if it is a distinct factor. Future longitudinal studies would contribute towards making this clearer. With one exception, all of the studies were quantitative, suggesting that there is a need for further research focussing on the subjective experience of dissociation in people with an eating disorder diagnosis.

1.5.2.3. Limitations of measures of dissociation

In considering the results from these studies it is important to evaluate the measures used to assess for dissociation. The studies used a variety of measures to assess for dissociative experiences. Some of the studies utilised the DES which has good test re-test reliability, ranging from 0.79 to 0.96 (Carlson & Putnam, 1993), and reasonable discriminant validity (0.67) (van Ijzendoorn & Schuengel, 1996). Other studies used the DIS-Q which has been shown to have good psychometric properties (Vanderlinden, Van Dyck, Vandereycken, Vertommen, & Jan Verkes, 1993). A few studies used subscales from other measures to assess for dissociation, which raise into question the validity of those measures.

The use of different measures also makes it difficult to make clear comparisons of the findings from the different studies. In addition, the majority of the studies used measures which assessed psychological dissociation, with only one study considering the impact of somatoform dissociation. Most of the studies also used self-report measures which could mean that dissociative experiences which individuals are not aware of may be missed.

1.5.2.4. Limitations of methods of analysis

The method of data analysis is important to consider when examining the results of these studies. Data was analysed using a variety of methods and at times not all of these analyses are presented within the results. This can make it difficult to assess how reliable the findings are. Additionally, studies utilise a variety of measures often measuring a number of factors but very few report taking into consideration type-1 errors and adjusting the probability to account for this. If more stringent probability values were used it could mean that some of the significant results found may be insignificant.

In addition, few studies reported power calculations and a number of studies did not report whether or not their sample was normally distributed. Given that many of the studies utilised parametric analyses, this raises questions about the generalisability of findings from those studies.

1.5.3. Clinical implications of findings

Despite the methodological limitations within these studies the evidence suggests that dissociation plays a role within eating disorders. Individuals with an eating disorder diagnosis report higher levels of dissociation. This can be an important factor when considering intervention and perhaps more consideration should be given to support these individuals with their dissociative experiences, particularly as it has been suggested that not addressing dissociative experiences can impact on treatment outcome (Cowan & Heselmeyer, 2011). Levin and Spauster (1994) have devised a cognitive behavioural treatment which includes strategies to support individuals with an eating disorder diagnosis who have dissociative experiences. These authors have used this model within inpatient services and reflect that it has been successful. By addressing dissociation within treatment, there is the possibility that long term treatment outcomes may improve.

Finally, healthcare professionals also need to be aware of dissociative experiences within eating disorders as this awareness can facilitate in early detection of dissociative experiences. Experiences of dissociation should also be assessed for during the assessment process, particularly as individuals with an eating disorder diagnosis who have high levels of dissociation may be at increased risk of self-injurious behaviour. Thus, there is a rationale for providing training about dissociation to staff working in eating disorder services.

1.5.4. Implications for future studies

When considering the limitations of these studies, future studies may want to consider the use of alternative methodologies. For example, a greater use of qualitative approaches would allow for more detailed exploration of the subjective experiences of dissociation within eating disorders. In addition, longitudinal studies would serve to bring a better understanding of the role dissociation may play in eating disorders over time.

There are also limited studies exploring the role that dissociation may play in managing affect within eating disorders and other eating disorder symptomatology besides the binge-purge cycle. Future research may want to consider these as the studies that have looked at affect and other eating disorder symptomatology have suggested that dissociation may be a factor within this. Further research into this may contribute to the development of an increased understanding of the role that dissociation plays in affect and eating disorder symptomatology.

1.6. Conclusion

In conclusion, individuals with an eating disorder diagnosis report higher levels of dissociation. Dissociation can be seen as having a number of roles within eating disorders. It may act as a coping strategy to manage traumatic experiences. Individuals with an eating disorder diagnosis may use dissociation as a way of managing certain affective states and dissociation may also act as a means of separating oneself from eating disorder symptomatology. Finally, the finding from the present review suggests that eating disorder services should assess for dissociative experiences as higher levels of dissociation in eating disorders can increase the risk of self-injurious behaviour.

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Chapter 2: Empirical paper

Dissociation and psychosis: Lived experiences

In preparation for submission to Journal of Trauma and Dissociation

(See Appendix C for author instructions for submission)

Word Count: 8,149 (not including tables and references)

2.1. Abstract

Purpose: Studies have shown that there is an association between psychotic disorders and dissociation. However, all of these studies are quantitative in nature and less is known about the role that dissociation plays or how it is experienced. The aim of the present study was to explore the lived experience of dissociation in individuals with a diagnosis of a psychotic disorder with a view to developing insight in to how best to provide clinical support. **Method:** Semi-structured interviews were conducted with five participants who had a diagnosis of a psychotic disorder and experienced dissociative episodes. Transcripts of the data were analysed using Interpretative Phenomenological Approach (IPA). **Results:** “Emotional impact of unsafe uncertainty” was identified as the super-ordinate theme, describing the emotions evoked by dissociative experiences and the uncertainty in exploring these experiences as it can feel unsafe. Six sub-ordinate themes were identified: Uncertain relief, Uncertain fear, Uncertain normality, Loss of connectedness, Unsafe trust and Unsafe to explore. **Conclusion:** Dissociative experiences play a role within psychotic disorders. Dissociation offered some relief from psychotic features and perhaps one of the roles of dissociation within psychotic disorders is as a mechanism to protect against the sense of fear and danger that can be evoked by psychotic experiences. Clinical implications of the findings include the need for more awareness of dissociation within psychosis services and exploration of these experiences within a trusting and containing therapeutic relationship. Additional qualitative research may further bring to light the role that dissociation has within psychotic disorders.

Keywords: Psychotic disorders, Dissociation, IPA, Lived experience

2.2. Introduction

2.2.1. Psychosis

Psychosis is a set of symptoms which can be experienced within the context of many mental health conditions. The symptoms of psychotic disorders are usually separated into positive symptoms, such as hallucinations and delusions, and negative symptoms, such as lack of motivation, self-neglect and social withdrawal (National Institute for Health and Care Excellence, 2014). The Diagnostic and Statistical Manual of Mental Disorders 5th edition (DSM-5) defines psychotic disorders as the presence of delusions, hallucinations, negative symptoms, disorganised thinking and disorganised motor behaviour (American Psychiatric Association, 2013). There are many diagnostic categories of psychotic disorders including schizotypal (personality) disorder, delusional disorder, schizophrenia, schizoaffective disorder and substance-induced psychotic disorder (DSM-5, American Psychiatric Association, 2013). The inclusion of these various diagnostic categorisations, such as schizotypal personality disorder, fits with the literature that psychotic disorders exist on a continuum (Van Os, Linscott, Myin-Germeys, Delespaul, & Krabbendam, 2009).

Psychotic experiences can feel overwhelming, disruptive and can impact on day to day functioning (Dilks, Tasker, & Wren, 2010). For example, in a thematic analysis of individuals' experiences of Schizophrenia, participants described being frightened, distracted and retreating as a way of coping (Flanagan et al., 2012). Voice hearing has been found to evoke similar feelings and individuals feel the need to comply with command voices as they believe that they lack control and are powerless to resist (Suryani, Welch, & Cox, 2013). These studies suggest that it is the experience of symptoms of psychosis rather than having a diagnosis which impacts on individuals.

The lifetime prevalence of psychotic disorders is about 1% (National Institute for Health and Care Excellence, 2014). Among the general population in the United Kingdom (UK)

incidence of psychotic disorders has been found to range from 21 per 100,000 to 58.4 per 100,000 with a pooled incidence of 31.72 per 100,000 (Kirkbride et al., 2012). More recently there has been interest in the experience of psychotic experiences in children. A meta-analytic study of psychotic symptoms in childhood and adolescence has found prevalence ranging from 4.7% to 35.3% with a median of 17% for children and 7.5% for adolescents (Kelleher et al., 2012). However, these studies considered symptoms of hallucinations and delusions which can be present or associated with a number of mental health difficulties which may explain some of the higher rates of prevalence.

There are a number of factors potentially related to the aetiology of psychotic disorders including biological, psychological and social factors (Broome et al., 2005; Read, Fink, Rudegeair, Felitti, & Whitfield, 2008). There has been growing interest in the role of childhood trauma in the development of psychotic disorders, leading to a number of studies investigating the links between trauma and psychosis (Bendall, Jackson, Hulbert, & McGorry, 2008; Heins et al., 2011; Kraan, Velthorst, Smit, de Haan, & van der Gaag, 2015; Shevlin, Dorahy, & Adamson, 2007; Spauwen, Krabbendam, Lieb, Wittchen, & Os, 2006; Varese, Smeets, et al., 2012). In a systematic review of childhood trauma within psychosis Bendall et al. (2008) found that rates of prevalence ranged from 28% to 73% and when compared to controls individuals diagnosed with a psychotic disorder reported more incidents of childhood trauma. In a more recent meta-analysis Kraan et al. (2015) found the mean prevalence rate of trauma in individuals with a diagnosis of a psychotic disorder to be 86.8%. Varese et al. (2012) in their meta-analytic study found that childhood trauma and adversity was significantly associated with an increased risk for psychosis (odds ratio = 2.78, $p < 0.001$). Read, Bentall and Fosse (2009) suggest that childhood adversities trigger an over activation of the stress regulating functions of the hypothalamic-pituitary-adrenal axis, which can lead to an increased risk of developing a psychotic disorder.

2.2.2. Psychosis and dissociation

The DSM-5 defines dissociative disorders as a “disruption of and/or discontinuity in the normal integration of consciousness, memory, identity, emotion, perception, body representation, motor control, and behaviour” (American Psychiatric Association, 2013, p. 291). It is thought to exist along a continuum of severity with, at one end, non-pathological everyday experiences of dissociation (such as daydreaming or doing things on ‘automatic pilot’). At the other end lies, more chronic, complex and pathological forms of dissociation such as dissociative amnesia, depersonalisation/derealisation or dissociative identity disorder which can affect the individual’s ability to function (Mulder, Beautrais, Joyce, & Fergusson, 1998). It is thought that everybody dissociates approximately 10% of the day, which involve the individual losing conscious awareness of their surroundings (Diseth, 2005). Studies have also found that between 3-5% of the population suffer from high levels of dissociation; dissociative experiences which occur frequently and impact on their daily functioning (Maaranen et al., 2005; Putnam et al., 1996).

A number of studies have investigated the relationship between dissociation and psychosis (Goren, Phillips, Chapman, & Salo, 2012; Moskowitz, Barker-Collo, & Ellson, 2005; Perona-Garcelán et al., 2008; Varese, Udachina, Myin-Germeys, Oorschot, & Bentall, 2011). Varese et al. (2011) were interested in understanding the relationship between dissociation and auditory hallucinations. They found that individuals with a diagnoses in the schizophrenia spectrum who experienced hallucinations reported higher levels of dissociation when compared to individuals with a diagnoses in the schizophrenia spectrum who did not experience hallucinations and control participants. They also found that dissociation could predict the presence of auditory hallucinations (OR = 1.20, $p < 0.01$) and this prediction became stronger when individuals were under high stress.

Trauma and dissociation are strongly linked. It is suggested that dissociation due to traumatic experiences make individuals more vulnerable to developing psychosis. Braehler et al. (2013) explored the relationship between dissociation and trauma in individuals diagnosed with first episode psychosis, chronic schizophrenia and community controls. They found that emotional abuse had the strongest correlation with dissociative symptoms in the first-episode psychosis and the chronic schizophrenia group, suggesting that emotional abuse appears to be the most powerful dimension in explaining variance in dissociation in these two clinical groups. However, as this is a cross-sectional study, no causal associations between childhood abuse and dissociation can be made. Also other confounding variables, such as age of onset of abuse or severity of abuse, were not considered.

Studies have suggested that dissociation has a mediating role between the relationship of childhood trauma and psychosis (e.g. Evans, Reid, Preston, Palmier-Claus, & Sellwood, 2015; Perona-Garcelán et al., 2012; Varese, Barkus, & Bentall, 2012). Evans et al. (2015) in a study of individuals with a diagnosis of psychotic disorders found that dissociation positively mediated the relationship between physical neglect and psychosis suggesting that increased dissociation can explain the effects of childhood physical neglect in increasing the likelihood of developing a psychotic disorder.

Varese, Barkus and Bentall (2012) investigated whether the relationship between childhood trauma and hallucination proneness within schizophrenia was mediated by dissociation. They found that dissociation positively mediated the relationship between sexual abuse and hallucination proneness, suggesting that higher levels of dissociation can explain the relationship between childhood sexual abuse and the likelihood of experiencing hallucinations. Similarly, Perona-Garcelán et al. (2012) found that dissociation positively mediates between childhood trauma and hallucinations, but more specifically they found that depersonalisation plays an important role within this. They argue that voice hearing may be a dissociative phenomenon and may be a part of a

derealisation continuum. Although these studies indicate that dissociation may play a role within psychotic disorders, it is difficult to establish exactly how dissociation impacts on psychotic disorders.

2.2.3. Qualitative studies of psychosis and dissociation

When considering the role that dissociation may have within psychotic disorders the use of qualitative methods may allow for a more in depth exploration of the impact that dissociation has on individuals with a diagnosis of psychosis. Although there are a number of studies exploring the association between dissociation and psychotic disorders using quantitative methodologies, there are currently no studies which have explored dissociation within psychotic disorders using qualitative methodologies.

A number of studies have explored individuals' experiences of a psychotic disorder using qualitative methodologies (Abba, Chadwick, & Stevenson, 2008; Flanagan et al., 2012; Suryani et al., 2013). Flanagan et al. (2012) and Suryani et al. (2013) found that individuals with a diagnosis of psychotic disorders can feel frightened and powerless by their experiences. Individuals can also feel directly attacked by their psychotic experiences (Abba et al., 2008; Boyd & Gumley, 2007) and these individuals have a sense of loss of relationships with family and friends who are believed not to understand what the individual is going through (MacDonald, Sauer, Howie, & Albiston, 2005; Robertson & Lyons, 2003; Wagner & King, 2005). However, individuals' experiences are not entirely negative. Some studies have found that individuals appreciated some aspects of their psychosis, for example, an increased compassion for others or being reconnected with creativity (Nixon, Hagen, & Peters, 2010; Robertson & Lyons, 2003).

Although there are no qualitative studies exploring dissociation within psychotic disorders, studies exploring the experiences of voice hearing has begun to shed some light on the role dissociative experiences may play within psychotic disorders. For example, Anketell, Dorahy and Curran (2010) in a qualitative study of voice hearing

found that individuals related their voices to traumatic experiences and voices were seen as if they were a separate entity to the individual. Corstens and Longden (2013) discovered that individuals described their voices as having their own personality and representing personifications of the individuals' social networks, suggesting that voices may represent dissociated emotional content from these relationships. Longden, Madill and Waterman (2012) argue that voice hearing can frequently be precipitated by stress or trauma and that it was best understood as dissociative rather than psychotic in nature, identifying the need for more qualitative studies when exploring dissociative experiences.

2.2.4. Rationale and aims of the study

Research has shown that there is an association between psychotic disorder and dissociation. However, the role that dissociation has within psychotic disorders is still unclear. To date there have been no qualitative studies exploring how these experiences are understood. From studies on experiences of voice hearing the benefits of qualitative exploration has been identified. The use of qualitative methodologies when exploring dissociation in psychotic disorders may support in gaining a better understanding of the role of dissociative experiences within the context of psychotic disorders and the meaning that individuals attribute to these experiences. The aim of the present study is to explore the lived experience of dissociation in individuals with a diagnosis of psychotic disorder. In particular, it will explore how participants subjectively experience and make sense of dissociation and their dissociative experiences.

It is hoped that, through gaining a deeper understanding of how individuals with a diagnosis of psychotic disorders experience dissociation, this may inform practitioner understanding of clients' perspectives and experiences. This may also potentially provide indications regarding how to support such individuals as well as informing directions for future research in this area.

2.3. Method

2.3.1. Design

Taking into consideration the exploratory nature of the research aims, the present study used a qualitative methodology. A semi-structured interview was utilised to elicit participants' accounts of their experiences. Since the principal aim of the study is to understand the lived experiences of dissociation in individuals with a diagnosis of psychotic disorders, Interpretative Phenomenological Analysis (IPA) was considered to be the most appropriate method of analysis. IPA is phenomenological as it aims to explore how individuals make sense of their world and the meaning that particular experiences hold for them (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008), allowing for a greater understanding of the meaning that individuals bring to their experiences of dissociation within the context of psychosis. However, it is also important to recognise that the experiences individuals discuss are likely to be partial and complex accounts constructed by the participant and the researcher (Larkin, Watts, & Clifton, 2006). Therefore, it is important to hold in mind the researcher's position and aim to provide an account which is as close to the individual's experience as possible (Smith, Flowers, & Larkin, 2009).

2.3.2. Materials

A semi-structured interview schedule (Appendix D) was developed by the principal researcher and the research team who were familiar with working with individuals with a diagnosis of psychosis and qualitative research methods. The questions within the schedule were constructed based on the aims of the study, consideration of qualitative studies exploring experiences of psychosis and studies exploring voice hearing within the context of psychosis (Beavan, 2011; Dilks et al., 2010; Flanagan et al., 2012). In line with IPA epistemology, the interview schedule was designed to enable participants to

explore relevant experiences through non-directive, open-ended questions (Smith et al., 2009).

2.3.3. Procedure

2.3.3.1. Ethics

Ethical approval was obtained from Coventry University (Appendix E) and the British Psychological Society's code of human research ethics was adhered to (The British Psychological Society, 2011). Written informed consent was sought using a participant information sheet (Appendix F) and a consent form (Appendix G) developed using guidance from the Health Research Authority (HRA) (Health Research Authority, 2014).

2.3.3.2. Recruitment

Participants were recruited through third sector support groups. The researcher approached third sector organisations regarding the study and received gatekeeper permission from managers of these organisations to advertise the study. The researcher provided a research summary sheet (Appendix H) of the study that was advertised within the organisations and the researcher also attended support groups to discuss details of the research study. Potential participants gave verbal consent to managers of organisations for the researcher to contact them to discuss the study in more detail.

Participants who were interested in the study were provided, by the researcher, with the participant information sheet (Appendix F) giving details about the purpose of the research, what participation in the study would involve and ethical issues. Recruitment criteria for the study were detailed in the participant information sheet and the researcher discussed these with each participant to ensure that they met those criteria. Participants were included if they were aged 18 years or older, had a diagnosis of a psychotic illness or disorder, self-identified as having experiences of dissociation and reported feeling able to hold a one to two hour long conversation in English.

Participants were excluded from the study if they were in an acute phase of psychosis, accessing acute inpatient care or accessing crisis support services. Participants were also excluded if their psychotic symptoms were a consequence of an organic condition such as Dementia, they had a diagnosis of bi-polar disorder, they had a diagnosis of substance induced or puerperal psychosis, or if they had a diagnosis of an at risk mental state.

2.3.3.3. Interviews

Semi-structured, individual interviews were conducted by the researcher between December 2015 and March 2016. Interviews took place at support group locations that were familiar and accessible for participants. Prior to the interview participants were requested to complete a written consent form and demographic information sheet (Appendix I). The interviews lasted between 30 and 100 minutes. The interviews were digitally recorded with consent from participants and they were informed that any identifying information would be removed from the verbatim transcripts. At the end of the interview participants were made aware of available support organisations (Appendix J) in case of any concerns or distress raised.

2.3.4. Participants

Five participants were recruited, including two males and three females. Their age ranged from 27 to 56. Four of the participants described themselves as white British and one as white African. All of the participants had a diagnosis of psychotic disorders including schizophrenia, paranoid schizophrenia, schizoaffective disorder and psychotic depression. None of the participants had a diagnosis of first episode psychosis and all of the participants have experienced psychosis for a number of years. Two of the participants were married and three were single. Two of the participants had children. Two participants lived with their partners and three participants lived with their parents. To preserve anonymity, participants were provided with pseudonyms.

2.3.5. Analysis

2.3.5.1. Procedure

Following each interview, the audio recordings were transcribed verbatim and any identifying information was removed. Participants were provided with a pseudonym. An excerpt of a transcript is included in the appendices (Appendix K). An IPA framework was used to analyse the data following steps outlined by Smith et al. (2009). Briefly, transcripts were read and re-read prior to initial coding. The transcript was read, initial codes and emerging themes were identified and these initial themes were developed into sub-ordinate themes and super-ordinate themes for one participant. This process was repeated for all participants prior to eliciting the patterns across all cases and clustering them into sub-ordinate themes within the super-ordinate theme. A more detailed description of the analysis process, together with figures, are included in the appendices (Appendix L).

2.3.5.2. Validity

Guidelines for qualitative research provide steps to ensure credibility (Thomas & Magilvy, 2011; Yardley, 2008). The process of coding and development of themes was reviewed by a colleague and discussed (Thomas & Magilvy, 2011). In addition, themes were discussed with the research team. An audit trail of the data analysis process and a reflective journal was kept by the researcher in order to assist with transparency, reflexivity and checking (Yardley, 2008). Prior to conducting interviews, the researcher engaged in a “bracketing interview” in order to highlight potential biases which were considered throughout the process of analysing the data.

2.3.5.3. The researcher’s position

IPA methodology highlights the importance of the researcher being aware of their own preconceptions and how these can impact upon interpretation and analysis of the data (Larkin et al., 2006; Smith et al., 2009). The researcher’s interest in the research study

stemmed from experiences of meeting individuals who have faced hardships in life but have overcome these without professional support to live fulfilling lives and the contrast of this to individuals who later in life experience profound mental health difficulties. The researcher was a trainee clinical psychologist with no prior involvement with the third sector voluntary organisations involved in the recruitment to the study or prior clinical experience working with individuals who have dissociative experiences. However, at the time of conducting the interviews the researcher worked in a service supporting individuals with psychotic disorders. This was a new experience for the researcher who had no previous clinical experiences of working with individuals with a diagnosis of psychosis. The researcher was therefore more aware of experiences of psychotic disorders which could have influenced the distinction between psychotic and dissociative experiences.

On the other hand, the researcher had an interest in the concept of dissociation and had knowledge of prior research in this area. This was acknowledged during analysis of the data and careful consideration was given to any experiences described by participants which the researcher believed to be a symptom of psychotic disorder or a dissociative experience. The researcher engaged in a “bracketing interview” prior to research interviews which identified that the researcher anticipated individuals not to have a clear understanding of their experiences and attributing some of their experiences to psychosis. The researcher also considered whether dissociation would be a separate experience from psychosis and anticipated that individuals would view these experiences as different but interlinked in some way. These views were taken into consideration during the process of analysis as there were times where these anticipations impacted on the grouping of initial themes into sub-ordinate themes.

2.4. Results

Following the analysis of the data, one super-ordinate theme emerged; Emotional impact of unsafe uncertainty. The theme and sub-ordinate themes are shown in table 2.1 and discussed narratively with consideration of convergence and divergence within themes.

Table 2.1: Super-ordinate and sub-ordinate themes

Super-ordinate theme	Sub-ordinate themes
Emotional impact of unsafe uncertainty	Uncertain relief Uncertain fear Loss of connectedness Uncertain normality Unsafe trust Unsafe to explore

2.4.1. Super-ordinate theme: Emotional impact of unsafe uncertainty

“Emotional impact of unsafe uncertainty” illustrates the impact that dissociative experiences can have on participants and their wish to understand these experiences in the hopes of gaining insight into their difficulties. However, alongside this need for understanding there is the emotional impact that can arise from their experiences and the uncertainty of exploring what is occurring. There also appears to be a sense of being alone in the journey to gain an understanding as others are perceived to be unhelpful. This theme is explored further below in the sub-ordinate themes: Uncertain relief, Uncertain fear, Loss of connectedness, Uncertain normality, Unsafe trust and Unsafe to explore.

2.4.1.1. Uncertain relief

The sub-ordinate theme “uncertain relief” describes the relief participants would feel within dissociative experiences. However, these experiences usually left participants feeling uncertain about what was occurring. Four of the participants described how their experiences provided a sense of relief. For Jane and Anne dissociation offered them relief from difficult experiences:

“I wasn’t dealing with anything so it must have got so much that my mind actually went elsewhere basically and it was overwhelmed.”

Anne (Lines 128-129)

“I think things were going on in my life (pause) that I couldn’t cope with you know, the scary things and the lack of affection. I’d never been good enough really so you just slip out of it for a minute and it’s a relief.”

Jane (Line 137-140)

For Ben the disconnection from reality provided relief from the pressure of his voices:

“There’s too much stress and pressure and the voices are talking to me. Then I create a sort of world that I can live in for that eight hours. I can leave it when somebody comes.”

Ben (Lines 354-357)

Ben illustrates how his voices can impact on the stress that he feels and that by creating this fantasy world he not only gains relief from the pressure of the world but also from the impact that his voices have on his life. Participants also described their experiences

as out of bodily experiences, feeling as if parts of their body had disappeared and becoming another person. These experiences leave them uncertain about what has occurred:

"I came in, I sat on the chair and my body was up on the ceiling. My mind was up on the ceiling and I was looking down on myself curled up in the chair screaming my head off thinking why is she screaming, what's going on."

Jane (Lines 84-86)

For Jane, the disconnection from her body provided a sense of relief as she was removed from her distress. However, there remains a sense of confusion as she can see herself curled up in the chair and as she is removed from the situation there is uncertainty about what is happening and why it has occurred. Similarly for Ben and John the relief felt from the disconnection would end when they gain awareness as they are left with the uncertainty of what may have occurred in the time that they had lost:

"I'd go to sleep in my bed but then the next morning I'd wake up outside and I'd have no idea how I got there."

John (Lines 83-84)

"I'd wake up and I was soaking wet or I fell into a hedge or the dog would run home itself and I was still there but I couldn't figure out why I did that, where I am, what I was meant to be doing."

Ben (Lines 212-214)

Here Ben describes the confusion he feels after a dissociative experience and the uncertainty of where he is or what he should be doing.

2.4.1.2. Uncertain fear

Although there was safety within dissociative experiences there was also the fear evoked by these experiences due to the lack of control over them and the sense of danger that can come after these experiences. For three participants the lack of control could make them feel as if they were trapped:

“It’s as if you’re falling down a big hole and there’s nothing to hold on to and it’s just going to go on forever and ever and ever. You sort of have nothing to hold on to, a deep, deep hole.”

Jane (Lines 169-171)

Here Jane emphasises the sense of the experience being unending and without anything to hold on to it can feel as if there is no escape from the experience. Ben and Anne echo this struggle to reconnect with the world and for Ben it would mean spending long hours within his fantasy until someone else brought him back to reality:

“I thought I was going to die because I kept forgetting stuff and if I walked into something dangerous and forgot about it and didn’t realise the next day then something bad could have happened so I was actually waiting to die.”

John (Lines 183-186)

John describes a real sense of danger for his life in the uncertainty of what may have occurred in the time he cannot remember. Tia and Ben similarly described the fear of danger to themselves:

"I'm going to completely disappear (long pause) yeah it's quite horrible actually, very horrible."

Tia (Lines 147-148)

For Tia, the inability to control these experiences evoked a fear of losing oneself completely, particularly as the disconnection from self could occur suddenly and without warning. Alongside the fear of losing oneself, three of the participants described the worry of not knowing if they may have caused harm to themselves or to others:

"I always say to them what did I do because I'm always wondering if I embarrassed myself or if I hurt someone."

John (Lines 254-255)

"Eventually I suppose I must have come back down and then I can remember my little lad coming up to me. He was only three and I was really scared that I would harm him you know so I said go away keep away from me."

Jane (Lines 86-89)

Jane was wanting to be alone after her experience as she feared that she may harm others after an out of body experience. Perhaps this was due to the uncertainty of what had occurred and the emotional impact of this. On the other hand, for John others were

kept at a distance as they could be seen as interrupting the relief that his experiences provide:

“My wife knocked on the door. I’d get upset because it would spoil the reality and I used to get annoyed and really get angry.”

Ben (Lines 412-414)

Ben would keep others at a distance by asking them not to disturb him so that the fantasy he had created would not be spoiled.

2.4.1.3. Loss of connectedness

All of the participants described a sense of loss from their experiences. Ben and Anne experienced loss in their relationships:

“My family actually mentioned like relationships because I was doing fine at uni but I wasn’t able to talk to my fellow students and I wasn’t able to talk to them much. Like I said before, I was pretty much very mute and also not hearing them. Thankfully, you know, my sister found my psychotherapist and suggested him and it rang true with me that yes it really affected my relationships.”

Anne (Lines 367-372)

“The removal from the people you love and society in general you know um not being able to connect um reach other people it’s really hard”

Anne (Lines 158-160)

“When I’m with the grandchildren I become Grandpa and Ben doesn’t exist. I exist but I’m watching someone else and when I’m having fun I don’t understand what the fun is. I know I’m chasing my grandchildren round [...] but they haven’t done it through Ben they’ve done it through Grandpa”

Ben (Lines 583 – 585, 643)

For Anne her experiences made it difficult for her to build relationships with her fellow students and this left her feeling isolated. Whenever Ben spent time with his grandchildren he did not exist and could not connect with the experiences he had with them. Perhaps for both Anne and Ben their experiences have led to them missing out on the relationships they could have had. Jane and Tia, on the other hand, describe how their experiences have resulted in them having to stop activities which they enjoyed:

“It was pretty difficult really and in the end it happens such a lot that I gave up my course.”

Jane (Line 182)

“I can’t do, you know, as much stuff as I’d like to do (pause) cause I go swimming and if my arms are feeling like that I don’t always go swimming.”

Tia (Lines 111-113)

For both Jane and Tia their experiences have meant that they have given up on meaningful activities and perhaps lost what they could have wanted to achieve. Jane’s description of giving up perhaps links to a sense of powerlessness over her experiences:

*“The last time I have forgotten a day was when I was in the inpatient unit.
I lost three days in a row, I lost three days of my life.”*

John (Lines 171-172)

John describes the time he has lost during his experiences as a loss of life. Describing his experiences in this way highlights the impact that these experiences have on his life.

2.4.1.4. Uncertain normality

The sub-ordinate theme “uncertain normality” describes the indescribable nature of participants’ experiences and how these experiences become a part of life as they are difficult to understand. All of the participants spoke of being unable to make sense of their experiences and the difficulty that can arise in trying to describe their experiences to others:

“If you have something physical you can talk to your friend you can talk to your family and you make it feel better. You can think your way through things but when your ability to think clearly is affected the suffering is such that you can’t really describe it.”

Anne (Lines 474-477)

Anne describes that the experience of dissociation and its impact on her ability to think as being distressing in a way that she cannot express in words. Through contrasting these experiences with the experience of physical difficulties, she highlights how difficult it can be even for her to understand what is occurring. Similarly, Ben and Tia found their experiences difficult to understand and worried about what others may think if they tried to talk about it:

"I haven't mentioned it because when I feel well I think oh it's a silly thing to talk about."

Tia (Lines 279-280)

Tia finds it difficult to talk about her experiences with others as she is uncertain how it would be perceived and her concern is that it may be seen as "silly". Three other participants describe how such concern for how the experience may be perceived made them reluctant to talk to professionals:

"I haven't really told anyone about them because I'm still trying to figure them out. For me the only way I'll tell the psychologist or psychiatrist is once I figure out before what's actually happening so at least when I go in there and they ask questions I'll be able to answer the questions."

John (Lines 156-159)

Here, John demonstrates how there is a need to try to understand what he is experiencing and without this understanding he would be unable to accurately describe it to others in a way that they would understand. The experience can feel unexplainable to himself and therefore there are bound to be questions that he may not be able to answer. For him it is better to remain silent about his experiences until he is able to make sense of his experiences.

Alongside this desire to understand an experience that seems unexplainable, three participants described how, to them, the disconnection became a part of life:

“A lot of people wouldn’t want to live like that but to me it’s normal so I live my normal life, my frightened little normal life but it’s more frightening the other side.”

Ben (Lines 572-574)

Ben emphasises the difficulty in understanding his experiences as for him the disconnection is part of life and he holds on to this. There is the uncertainty of what life would be like without these experiences and the belief that it is better to continue with these experiences than risk losing them. Perhaps he is struggling to let go of these experiences due to the fear of being left without a way of coping with difficult and distressing situations.

Similarly for John he sees his experience as part of his illness and Jane has come to accept her experiences as part of life:

“Simply to accept it really and sometimes to let yourself go to a certain extent. To accept it and accept the way that I am and there’s only so much that I can do about it.”

Jane (Lines 423-425)

Jane communicates how the inability to change these experiences can lead to an acceptance of it as just part of who she is.

2.4.1.5. Unsafe trust

For all of the participants, not only was it difficult to understand their experiences but they spoke about being unable to trust others to support them and the belief that they were being dismissed:

"They don't listen, you know, they think if I have a good day I, I'm telling lies. There are things I just don't say I try and just live."

Ben (Lines 712-713)

Ben describes how when seeking support he is left thinking that he has not been believed and what he has said has not been heard. All the participants spoke about experiences where they have not been believed by others and believing that others do not understand:

"You realise how vulnerable you are at that time because not everyone understands."

Anne (Line 161)

For Anne, the lack of understanding can leave her feeling vulnerable as there is the fear of being mistreated in some way. Similarly for Ben and John there was a reluctance to seek support for their experiences, as they fear that they may be misunderstood and admitted to an inpatient unit, while Jane has actually experienced a negative reaction from a healthcare professional:

"I don't trust them to tell them. I don't think they'd believe me, you know, if I say I live in another world they'll think, they'll say oh god we're gonna have to lock him up."

Ben (Lines 702-703)

"I didn't know how to explain it to the psychiatrist. I didn't, I didn't know what to do. I was, I was too scared to tell them in case they put me away in hospital so I actually kept it to myself to be honest."

John (Lines 330-332)

John illustrates how the fear of being "put away" can stop him from seeking support. For Anne and Jane, they have had experiences in the past which has made them reluctant to talk about their current experiences:

"That's pretty crushing really (laughs) you know when you go to the doctors and they're holding you at arm's length as if what you've got is catching."

Jane (Lines 245-247)

Jane's experience of being kept at arm's length meant that she was reluctant to discuss her experiences. Her phrasing of "as if what you've got is catching" highlights the lack of understanding that others can have but also the reluctance that healthcare professionals may have to explore such experiences.

2.4.1.6. Unsafe to explore

The sub-ordinate theme "unsafe to explore" refers to participants concerns about exploring their experiences as it can evoke uncomfortable feelings. Four participants described the intense emotional reactions that could be evoked from their experiences:

"It wasn't like a neutral experience, it was emotions that came with it umm and these were really intense emotions of a deep, deep loneliness really which is odd for me."

Jane (Lines 165-167)

These emotions felt for Jane as if they were at odds with who she is and she struggled to understand these differences. Similarly Anne experienced a variety of emotions that could be difficult to pick apart:

"There's a lot, there's a lot of emotion that's quite hard to find your way through it."

Anne (Lines 207-208)

For both Jane and Anne the emotional impact of dissociation makes exploring their experiences more difficult which perhaps leaves them feeling uncontained:

"I don't know, I still don't know how to manage it. I still don't know what to do."

Jane (Line 246)

In contrast to the belief that the experiences are unsafe to explore, Anne sought support for her experiences and had begun psychological work. Anne had begun to understand her experiences and valued having someone who would listen and empathise with her:

"I think like um really understanding the problem, really grasping the problem. That's never happened in my life before where someone has really completely understood."

Anne (Lines 401-403)

Anne highlights here how having someone who has understood her and supported her in beginning to understand her experiences can make it easier to be open and more willing to explore emotion filled experiences.

When looking at the sub-ordinate themes together, while these experiences offer a sense of relief or safety it brings with it the uncertainty and impacts on relationships with others. For all of the participants this disconnection was followed by a sense of danger, fear of hurting themselves or other people and the fear of being unable to reconnect with reality. For all of the participants, their experiences have been difficult to explain both to themselves and to others. There is this dilemma between wanting to understand what is occurring and the fear of the consequences of such exploration. Alongside this, participants feel that they are alone as others have been unhelpful in the past or have dismissed their experience. However, for Anne who has begun her journey in exploring her experiences, there is hope that things can improve.

2.5. Discussion

The present study explored the experiences of dissociation in individuals with a diagnosis of a psychotic disorder. It aimed to explore the lived experience of dissociation in individuals with a diagnosis of a psychotic disorder. One super-ordinate theme and five sub-ordinate themes were identified and these will be discussed in relation to existing literature.

2.5.1. Discussion of findings

“Emotional impact of unsafe uncertainty” describes the uncertainty that individuals described in relation to their actual experiences of dissociation, together with a sense of feeling insufficiently safe to be able to explore these experiences. The experience of “unsafe uncertainty” in relation to dissociative experiences is a unique finding within the present study. Previous research exploring experiences of dissociation have focused on experiences of treatment and the disconnection that individuals can feel (Allman, 2014; Fox, Bell, Jacobson, & Hundley, 2013) but have not taken into account the uncertainty and fear that can be present in trying to understand or make sense of these experiences. The lack of safety that individuals feel may also impact on other aspects of their lives. Within Maslow’s hierarchy of needs (Maslow, 1943), safety is the second stage of the hierarchy. If individuals with dissociative experiences do not feel psychologically safe, this could potentially affect their self-esteem and social relationships.

Dissociation can be seen as providing temporary relief from psychotic experiences as it can remove the individual from their psychotic experience. Individuals can feel as if they are under attack from their psychotic experiences (Abba et al., 2008; Boyd & Gumley, 2007) and it may be that dissociation acts as a means of protecting oneself from the sense of danger or threat that these experiences illicit (Alayarian, 2011). The relief that participants experience is followed by a sense of uncertainty regarding what has occurred but also a fear for their safety. Similar to individuals with a diagnosis of a dissociative disorder, there is a fear of what might be discovered about what had happened during dissociative experiences (Mauritzson, Bergendahl Odby, Holmqvist, & Nilsson, 2015).

“Unsafe trust” refers to the difficulty participants experienced in seeking support for their experiences. For some, this was due to previous experiences they had of services when seeking support for symptoms of psychotic disorders and a consequent fear of a negative reaction from professionals. This is in line with the literature on help seeking in

individuals with a diagnosis of a psychotic disorder who have experienced being dismissed, not listened to, fearing the consequences of involvement from mental health services and being uncertain about what support is available (Cook & Chambers, 2009; Rofail, Heelis, & Gournay, 2009; Schön, Denhov, & Topor, 2009; Stovell, Wearden, Morrison, & Hutton, 2016; Tanskanen et al., 2011). Individuals with a diagnosis of a psychotic disorder can also face stigma and tend to hide their symptoms from others (Burke, Wood, Zabel, Clark, & Morrison, 2016). If individuals are faced with such experiences it can become a barrier to seeking future support even if their experiences cause emotional distress.

The description of experiences becoming a part of life or of being seen by participants as a part of who they are could be related to participants' experiences of managing symptoms of psychotic disorders. Studies have found that normalisation of psychotic symptoms was an effective strategy utilised by individuals in order to continue living with their presence (Suryani et al., 2013). It may be that participants are attempting to use this strategy to manage their dissociative experiences in the hopes that they will be able to continue to live their lives alongside these experiences. However, this can prove difficult as the uncertainty evoked by these experiences can leave individuals fearing the worst.

"Unsafe to explore" refers to the fear of being uncontained when trying to explore experiences of dissociation as it can bring individuals back in touch with uncomfortable feelings. Individuals who have dissociated from traumatic experiences tend to avoid thinking about traumatic experiences due to the emotional impact this can have but also hold on to dissociative strategies to support them to cope on a daily basis (Auerbach, Mirvis, Stern, & Schwartz, 2009). Perhaps there is an insecurity that is felt by the individual about whether they have the ability to examine these experiences (Mauritzson et al., 2015).

2.5.2. Methodological limitations

The findings from the present study need to be considered within the context of the study's strengths and weaknesses. IPA methodologies suggest smaller sample sizes to allow for a detailed idiographic examination of participants experiences and to ensure that the researcher does not become overwhelmed by the data (Smith et al, 2009). Within the IPA interviews, the emphasis is upon the depth and breadth of the data. As one of the interviews in the current study was thirty minutes in duration it might have brought into question the validity of this data. However, all of the interviews conducted were found to provide rich data of participants' experiences of dissociation.

In addition, the sample was relatively homogenous, as the majority of participants were white British and had a diagnosis within the schizophrenia spectrum disorders. Therefore, the results cannot be generalised to the wider population as these experiences may only be representative of a small group of individuals with a diagnosis of psychotic disorders. Additionally, there were some differences in the types of dissociation that participants experienced leading to differences in the meaning that they attributed to these occurrences. This can make it difficult to map the similarities and differences of these experiences particularly as the impact these experiences have on participants may vary. With a larger sample, there may have been a wider range of diagnoses of psychotic disorders, a broader representation of ethnicity and groups of individuals with similar dissociative experiences which might have resulted in a range of experiences with more divergence and convergence within the data.

Participants had a diagnosis of a psychotic disorder however, they were asked to self-identify dissociative experiences. Although descriptions of various types of dissociation were provided, it remains possible that some of the experiences individuals described were not dissociative in nature and this is a limitation of the present study and of the methodology adopted.

Although steps were taken to take into consideration the researcher's subjective position, this also needs to be highlighted when considering the validity of the analysis. The researcher's knowledge of dissociation and experience of working with individuals with a diagnosis of psychosis may have had an influence on the analysis process. This may possibly have affected the interpretation of the data, although a number of steps, including a "bracketing" interview, were taken in order to minimise the potential for such bias.

2.5.3. Clinical implications

This research has indicated that for some individuals with a diagnosis of a psychotic disorder dissociative experiences can have a major emotional impact on their lives and can leave them feeling unsafe and uncertain. In addition, the findings suggest that these individuals can find it difficult to trust others to support them with their experiences particularly if they have had negative experiences of services in the past. When working with these individuals it will be important to begin by establishing a trusting therapeutic relationship which feels containing and provides safety for exploration of experiences. Any exploration of dissociative experiences will need to consider the impact that this may have on the individual and that for some dissociation could be a way of coping with psychotic symptoms.

Although there is a link between dissociative experiences and dissociation there can be confusion between whether symptoms of psychotic disorders are in fact dissociative experiences. For the participants in the present study, some of their dissociative experiences appeared to be a distinct phenomenon that psychotic symptoms impacted upon. For some participants in the present study dissociation offered some relief from psychotic features and perhaps one of the roles of dissociation within psychotic disorders is as a mechanism to protect against the sense of fear and danger that can be evoked by psychotic experiences.

Mental healthcare services need to be more aware of dissociative experiences to enable in-depth assessments of clients with psychosis that also consider dissociation in the context of psychotic disorders. Increasing staff awareness of dissociation in psychosis, for example through focussed training, might facilitate earlier detection of dissociative experiences. In turn, this could have a positive impact on treatment outcomes. Professionals being aware of dissociation may also reassure individuals that it is safe to discuss these experiences and may encourage individuals to seek support. Additionally, professionals working with individuals with a diagnosis of a psychotic disorder need to ensure that individuals feel these experiences are listened to. Individuals need to be supported to understand what these experiences mean and this exploration will need to take into consideration the emotional impact dissociative experiences can have.

2.5.4. Future research recommendations

This topic area could benefit from further research exploring the impact of dissociative experiences on psychosis, focusing on particular diagnoses within the spectrum of psychotic disorders, as the impact and experiences of dissociation may not be the same across these different conditions. In developing our knowledge of dissociation within the context of psychotic disorders, there needs to be consideration of the similarities between psychotic symptoms and dissociative experiences. Further research is needed to determine whether some psychotic symptoms might be better accounted for if considered from the perspective of models of dissociative phenomena. Our understanding of symptoms such as auditory and visual hallucinations, for example, may benefit from further consideration in this regard.

2.6. Conclusion

The present study sought to explore the lived experiences of dissociation in individuals with a diagnosis of a psychotic disorder. “Emotional impact of unsafe uncertainty”

emerged as a single super-ordinate theme, describing the emotions evoked by dissociative experiences and the uncertainty in exploring these experiences as it can feel unsafe. Clinical implications of the findings include the need for greater knowledge and awareness of dissociation among healthcare professionals working within psychosis services and a need for clients to be able to safely explore these experiences within a trusting and containing therapeutic relationship. Future qualitative research in this area may serve to build on the preliminary findings of the present study in order to further illuminate the role of dissociation within psychotic disorders.

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Chapter 3: Reflective Paper

Tug-of-war-with-the-monster: Reflections on the process of research using an Acceptance and Commitment Therapy (ACT) model

Word Count: 3, 416 (not including title page and references)

3.1. Introduction

“Reflection is a learning journey of becoming a reflective practitioner, someone who is reflective moment to moment. It is learning through our everyday experiences towards realising one’s vision of desirable practice as a lived reality. It is a reflexive process of self-inquiry and transformation of being and becoming the practitioner you desire to be”

(Johns, 2013, p. 1).

Reflective practice allows the practitioner to be self-critical, learning from their experiences in order to develop as therapists and researchers (Dallos & Stedmon, 2009). It is important in informing practice, ensuring that the therapist is working ethically and safeguarding against unhelpful practice (Stedmon & Dallos, 2009).

There are a number of models of reflective practice which include the concepts of reflection and reflexivity. They can be used interchangeably but it is felt by some that these are distinct aspects of the process of reflective practice (Dallos & Stedmon, 2009; Thompson & Pascal, 2012). Dallos and Stedmon define personal reflection as encompassing “self-awareness of bodily sensations and emotions and the attentional focus on memories, experience and cognitions as evoked during in-the-moment reflective episodes” (2009, p. 4). They go on to describe reflexivity as a process whereby the practitioner applies theory and knowledge to reflective memories in order to make sense of those reflections.

Reflection and reflexivity are important in the practice of reflecting upon the process of conducting research which this reflective paper hopes to illustrate. In order to support with these procedures, a reflective journal was kept throughout the research process where in-the-moment experiences were recorded. Knowledge and theory from an

Acceptance and Commitment Therapy (ACT) perspective was utilised within the process of reflexivity.

3.1.1. The use of ACT within eating disorders and psychosis

This thesis has explored dissociation in eating disorders and psychosis. Studies have shown that ACT can be a useful model in working with individuals with an eating disorder diagnosis or a diagnosis of psychotic disorders (Bach, Gaudiano, Hayes, & Herbert, 2013; Hill, Masuda, Melcher, Morgan, & Twohig, 2015; Juarascio et al., 2013; Manlick, Cochran, & Koon, 2013). The aim of ACT when working with individuals with an eating disorder diagnosis or psychosis is to enable them to increase their psychological flexibility; disentangle from difficult thoughts and feelings, with the purpose of assisting individuals to live in a valued way (Oliver, Joseph, Byrne, Johns, & Morris, 2013; Sandoz, Wilson, & DuFrene, 2011).

3.1.2. ACT and reflection

ACT is a third wave behavioural therapy (Coyne, McHugh, & Martinez, 2011). One of the core messages of ACT is to accept what is out of your control and commit to action which enriches your life (Harris, 2009). ACT is guided by an existential component and encourages values-based action, using core values to guide and motivate behavioural change (Harris, 2009). Within ACT consideration is given to the influence of experiential avoidance; how certain thoughts and feelings can be uncomfortable and are avoided (Hayes, Strosahl, & Wilson, 2003). Therefore, ACT encourages the individual to be mindful while taking values-based action and be open to the experiences that may occur (Harris, 2009). This openness and awareness is an integral part of the reflective process (Stedmon & Dallos, 2009).

3.1.3. Hexaflex and triflex model

Within ACT the hexaflex is a model that can be used within formulation and it covers the six core principles of ACT; acceptance, defusion, contact with the present moment, self-as-context, values and committed action (Harris, 2009, p. 10). These processes can be grouped together into three units known as the triflex; being open (acceptance and defusion), being aware (contact with the present moment and self-as-context) and doing what matters (values and committed action) (Harris, 2009). For the purposes of this reflective report the hexaflex model will be used in order to provide more detailed reflection within a structured framework.

ACT also utilises metaphors as a part of the therapeutic process (Harris, 2009; Hayes et al., 2003). This enables the therapist to engage with the client's language system and allows the client to reflect on fusion and avoidance (Hayes et al., 2003). This reflective paper will engage in the use of metaphors to bring to life the reflection process. As such, reflection can be likened to the metaphor of a bothy (NHS Fife & Fife Bipolar Group, 2014) which offers an open, freely available space to rest and reflect upon the journey ahead (Appendix M). Similar to the idea of the bothy where individuals who use it may leave something behind that could be helpful to future travellers, it is hoped that this reflective paper can be left behind as a way of supporting future researchers on their reflective journey.

3.2. The process of research hexaflex

3.2.1. Acceptance

Acceptance within ACT means being open to painful feelings, emotions and sensations, allowing them to be and not resisting or pushing them away (Harris, 2009). Throughout the process of conducting research there has been the struggle between acceptance and avoidance. Thinking back to the start of the research journey, there were initially many directions in which the research could go. Like being at a crossroads, there was

a need to reflect on each possible path that could be taken. As a researcher I had the need to devise something that would be innovative, something that had not been done before. My curious mind wanted to travel on the paths less ventured in the hopes of new discoveries. This made the initial stage of choosing a research topic problematic as certain ideas were difficult to let go of and it can be hard to accept having to make a detour on the path I wished to travel. Allowing myself the space to reflect on the various emotions that were evoked during this time allowed me to be more open and willing to listen to the advice of others. This, along with my never-ending curiosity, enabled me to accept that this may be the first part of the journey in my pursuit of knowledge and that I am not letting go of my ideas but adjusting them so that I am moving towards a more valued direction.

The research process was filled with a variety of uncomfortable emotions; such as fear, anger, anxiety and sadness. The struggle with these emotions was like being in a tug of war with a monster (Hayes et al., 2003) that is pulling you toward a black hole filled with uncertainty (Appendix M). While in this struggle it was difficult to acknowledge my feelings as there was the want to push these feelings away. Keeping a reflective journal supported me in this process as by writing these thoughts and feelings down I was able to let go of the rope and be open to understanding these experiences.

It struck me that my own struggle with these uncomfortable experiences mirrors, in some way, the struggle that my participants face with their experiences. They too are in a tug of war with a monster that is pulling them towards a black hole of uncertainty which may appear never ending and difficult to escape. They continue this struggle as they avoid exploring their experiences because it feels unsafe to do so and there is the fear that letting go of the rope may lead to a worse reality. In continuing the struggle they remain caught within unsafe uncertainty. This highlighted to me the difficulty that participants may have faced in agreeing to be a part of a study which required them to be open to speaking about these uncertain experiences that hold uncomfortable feelings. However,

I am hopeful that perhaps engagement in the study has relieved some of their uncertainty and may allow participants to feel more able to begin to explore letting go of the rope.

3.2.2. Defusion

Defusion refers to stepping back and separating from thoughts and memories rather than getting caught up in them (Harris, 2009). When conducting research and writing a thesis it becomes easy to lose perspective as it can feel all encompassing. The metaphor “this piece of paper is my universe” (Kozak, 2009) seems quite apt in describing how the process of research can fill your vision until all you can see is the piece of paper (Appendix M). I found that there were times where my research was all that I could focus on and that all my thoughts were around what I needed to do in order to complete what I believed was a large but important task. At times my mind would be filled with thoughts of failure or not having enough time to complete what needed to be done. This made it difficult to take a step back or move the sheet of paper away from my face, causing fusion with the thoughts that I may fail and moving me away from the direction I wished to travel. At these times I found using the passengers on a bus metaphor (Hayes et al., 2003) helpful in taking a step back from my thoughts (Appendix M). By seeing my thoughts as passengers on the bus I could acknowledge and understand them without allowing them to change the course I was travelling in.

In regards to participants, I was aware of how caught up some of them could be at times with their voices and delusional beliefs. By hearing their experiences I came to gain some insight into what their daily lives are like and what they contend with day to day. I wondered if, like thoughts and feelings, voices and delusions were creating detours in participants’ journey to valued based living. I was struck by one of my interviews where the participant spoke about believing that they had no quality of life and I wondered how much their voices and hallucinations impact on their lives for them to not be able to live in a way that they would see as meaningful. Taking a step back can be difficult and

perhaps in some way participants' dissociative experiences are a way of distancing themselves from voices and hallucinations.

3.2.3. Contact with the present moment

Contact with the present moment describes being aware in the present; connecting and engaging fully with what is happening in the moment whether that be internally or externally (Harris, 2009). This can be seen as the contrast to dissociation, the focus of this thesis, which in itself is a cutting off from present moment experiences. For participants, a vast amount of their time can be spent disconnected from reality and losing touch with the present completely. Thinking clinically, I wondered if assisting individuals to be more in touch with the present moment through mindfulness exercises would support them to reconnect with reality but also to feel more open to exploring their experiences.

Reflecting on the process of interviewing, as a researcher I felt I was required to be hyper aware during interviews. This was particularly important as there was the possibility that participants may have dissociative experiences during the interview process and as they may not be aware of when these experiences occur there was a need for me to monitor their behaviour. However, in doing so, there was the potential that I would lose touch with the present moment as I would be too focused on participants' behaviour rather than what may be occurring in the moment. Prior to the interviews, I ensured that I had some space for mindfulness practice to get in touch with my own thoughts, feelings and emotions. This supported me in being more aware of times where my mind had wandered from the interview and made it easier to bring myself back to focus on what was occurring in the room.

Taking time away from research was helpful in sorting through my experiences but also in providing time for contact with others. I could find it difficult at times to be in the present moment when taking time away as my mind would wonder back to my research and what

was remaining to do. At times, this could be helpful as the reflection would lead to a new understanding of elements I felt stuck with or would bare food for thought from what I had already discovered. However, at other times it would mean not fully enjoying the moments shared with friends and family which moved me away from a valued direction. During time spent with family and friends I created “office hours” (Kozak, 2009, p. 139) which was time I would set aside in the day for reflecting on any worries or concerns regarding the research process (Appendix M). This allowed me to then be open to any thoughts that occurred during time away from research and just let them be as if they were clouds in the sky.

3.2.4. Self as context

The self as context signifies the observing self which is the ability to observe our own thoughts, feelings and emotions (Harris, 2009). Within the process of research I have found the ability to observe my own thoughts, feelings and emotions to be helpful in engaging with the entire process. An observation I was aware of during interviews was the conflict between my role as a researcher and my role as a clinician. I was aware of feeling the need at times to rescue participants, particularly when they spoke about experiences where they felt unsupported and alone. As a clinician, I felt the need to offer some support but as a researcher I was aware that this would not be appropriate and it would not be expected by participants. I also wondered if I had taken on the role of a clinician, whether this would leave participants feeling that they were not listened to or that they were not given a space to voice their experiences.

I was struck by participants’ ability to reflect on their own experiences even though they may not fully recall what had occurred. I found it interesting that participants could recall the sensations, emotions and thoughts that they would have after having dissociative experiences. In contrast to that there were moments where there was no recollection of what had occurred and the fear that this could evoke. Participants spoke about the differences that can be present at times when they are unaware and I wondered if during

those times their fear may be due to losing a sense of themselves, i.e. being unable to observe their own thoughts, feelings and emotions.

3.2.5. Values

Values are what truly matter to us and it can influence our behaviour. Within ACT, values are seen as a compass which directs and guides us on our journey in life (Harris, 2009). Each of my roles, as a clinician and as a researcher, are fuelled by certain values which at times differ for each role. As a researcher my values are focused on a thirst for knowledge, a want for innovation and the excitement and curiosity of exploring roads less travelled. As within ACT, I found that it was important to hold these values lightly and be flexible with them as if you hold on too tightly it can become a struggle. Sometimes I found that I could hold on to my values as a researcher too tightly leading to feelings of frustration and anxiety. Balancing my values as a researcher and my values as a clinician could be difficult at times particularly when listening to participants' experiences. Having a research team and allocating time to discuss any difficulties that may arise from the research process has been invaluable to me. It has also enabled me to be more open and aware of my own inflexibilities and work towards a more flexible way of working.

Another difficulty that arose during my research process was balancing my personal values with those that are more in line with my role as a researcher and clinician. During the research process I went through a process of change due to a loss within my family. At this time, it was difficult to separate from my family values and hold on to my values as a researcher. At that time, having support from family and friends who encouraged me to keep going was very powerful and enabled me to re-connect with other values.

Listening to participants I was struck by their want to be helpful to others. When participants were asked why they decided to take part in the research study all of them spoke about wanting to be of help to others that may have similar experiences to them.

I wondered if this drive to help others was guided by their own experiences of seeking support and their potential beliefs that they may have been failed in some way. However, I contemplated if holding on to this want to help others may impede upon their willingness to seek support as most participants spoke about others not being able to understand as they have not had similar experiences.

3.2.6. Committed action

Committed action refers to taking effective action which is in line with our values even if that may bring pain and discomfort (Harris, 2009). When reflecting on participants struggle with their experiences it felt as if they were in a hopeless situation. It brought to mind the metaphor of the “man in the hole” (Hayes et al., 2003, pp. 101–102) where by participants were blindfolded to their experiences and in a hole with only a shovel to help them (Appendix M). If they continue to dig all that they are doing is making the hole bigger and moving deeper into their struggle. I wondered if by avoiding taking action to understand their experiences, participants continue to dig deeper into the hole of uncertainty. However, there was also the sense that others would not be helpful and if these experiences are filled with unpleasant sensations it can make taking committed action alone much harder.

As a researcher, using my values to guide my actions proved to be productive. In considering the values that underpin the research I was able to think about the actions that would be required for me to continue to move along my desired path. Once my research idea was developed and my research was on its way using the ACT process of value-based goal setting enabled me to break down the tasks I needed to achieve in order to complete this thesis. This proved to be useful at times when I lacked motivation as it would bring me back in touch with my values and reignite my curiosity and thirst for knowledge.

On reflection of my own value based actions, I am aware how my commitment can swing like a pendulum from avoiding or taking no action at times of frustration and anxiety, to committing to action and being directed by my values. I came to this realisation when looking back through my reflective journal and noticing that there were blank pages at particular points of my research journey. One particular instance of this was when I was in the process of applying for ethics. I wonder if my frustration at the slow process and the time it was taking to gain approval meant that I was not willing to acknowledge these sensations and so the pages remained blank. Perhaps the more valued action would have been to give myself the space to reflect on these sensations and be open to what I was experiencing.

3.3. Conclusion

The ACT concepts of being open, aware and doing what matters can be a helpful process in reflecting upon research and practice. By using this framework for my own reflection, I have found that it has enabled me to be more open and aware of the various experiences and sensations that can arise from undertaking research. The hexaflex model has supported me in thinking more flexibly and being aware of the potential biases that may have arisen during the research process, particularly when reflecting on participants experiences. This model has also been valuable in drawing together my experiences to notice areas of inflexibility or when thoughts and feelings have moved me away from taking valued action. Through this process I have clarified my values as a researcher and clinician and am more aware of how these values can come into conflict at times. However, clarifying my values has supported me in holding on to my curiosity and not losing my enthusiasm for research. Moving forward, I am hopeful that my values as a researcher will support me to continue to seek the paths less travelled and to be curious about well-established roads.

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4. Appendices

Appendix A: Author submission guidelines for Eating Disorders: The Journal of Treatment & Prevention

Instructions for authors

Thank you for choosing to submit your paper to us. These instructions will ensure we have everything required so your paper can move through peer review, production and publication smoothly. Please take the time to read them and follow the instructions as closely as possible.



Should you have any queries, please visit our [Author Services website](#) or contact us at authorqueries@tandf.co.uk.

Please note that *Eating Disorders* uses [CrossCheck™](#) software to screen papers for unoriginal material. By submitting your paper to *Eating Disorders* you are agreeing to any necessary originality checks your paper may have to undergo during the peer review and production processes.

Submission of Manuscripts

Article submissions should be made via e-mail to Leigh Cohn, Editor-in-Chief (Leigh@gurze.net). The Editor-in-Chief will accept MS-Word (preferred) or PDF files as e-mail attachments. Complete contact information must be included in the cover letter, which should be in the form of an e-mail. The subject line should state: "ED Journal Submission", and a confirmation will be sent back. If no response is received within 10 days, the author should write another e-mail for verification of receipt. **Articles under 25 double-spaced pages, including back matter and tables, are preferred (approximately 6,000 words max).** Submission of brief reports would still use standard APA headings (abstract, introduction, methods, results, discussion, etc.), but should be concisely written and be only 6-10 double-spaced pages in length (including tables, etc.). Please read "Manuscript Evaluation" (below) for more information.

Articles for *Eating Disorders* are generally unsolicited. For special topical issues or needs established by the Editor-in-Chief and/or Senior Editors, manuscripts may be solicited from authors with expertise appropriate to the special topic or need. As such, anonymous and/or masked peer-review is not possible.

Each submitted manuscript is usually reviewed by two members of the Editorial Board (see manuscript evaluation). The Editor-in-Chief and/or Senior Editors may reject an article outright, without its review by members of the Editorial Board, if its content is clearly outside the scope of the journal's topical domain, if it offers clearly unsubstantiated, slanderous commentary or invective against another professional, if it lacks basic grammar or usage conventions of the English language, or if it clearly violates accepted scientific standards. Most reviewers evaluate submissions on the criteria listed in the Article Evaluation Form (Aims & scope page).

All parts of the manuscript should be typewritten, double-spaced, with margins of at least one inch on all sides. Number manuscript pages consecutively throughout the paper. Authors should also supply a shortened version of the title suitable for the running head, not exceeding 50 character spaces. Each article should be summarized in an abstract of not more than 100 words. Avoid abbreviations, diagrams, and reference to the text.

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Tables and Figures

Tables and figures should not be embedded in the text, but should be included as separate sheets or files. A short descriptive title should appear above each table with a clear legend and any footnotes suitably identified below. All units must be included. Figures should be completely labeled, taking into account necessary size reduction. Captions should be typed, double-spaced, on a separate sheet.

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Appendix B: Table of quality assessment scores

Quantitative Studies	Title	Authors	Abstract	Rationale	Recent LR	Aim	Ethical Issues	Methodology	Study Design	Experimental Hypothesis/ Variables	Population	Sample	Data Collection	Data Analysis	Results Presentation	Discussion	Generalizable	Conclusion	Total
Beato, Cano, & Belmonte, 2003	2	1	1	2	1	2	0	1	1	1	2	1	1	2	2	1	1	0	22
Berger, Saito, Ono 1994	1	2	1	1	1	2	1	2	2	1	2	1	2	2	2	1	1	2	27
Brown, Russell, Thornton, & Dunn 1999	2	2	2	2	0	1	2	1	1	2	2	2	1	1	2	2	1	1	27
Claes & Vandereycken 2007	2	2	1	2	2	2	0	1	2	1	2	1	1	1	2	1	1	1	25
Claes, Vandereycken & Vertommen 2003	2	2	2	2	2	1	0	1	2	1	2	1	1	2	2	1	1	0	25
Demitrack, Putnam, Brewerton, Brandt, & Gold 1990	1	1	1	2	1	1	0	1	1	2	2	1	1	2	2	1	1	0	21
Engelberg, Steiger, Gauvin & Wonderlich 2007	2	2	2	2	1	2	2	2	2	1	2	2	2	2	2	2	0	2	32
Everill, Waller, & Macdonald, 1995a	2	1	2	2	1	2	0	1	2	2	1	1	1	2	2	1	1	1	25

Everill, Waller, & Macdonald 1995b	2	2	2	2	1	2	0	1	1	1	2	2	1	2	2	2	1	2	28
Farrington, Waller, Neiderman 2002	2	2	2	2	2	2	2	2	2	2	2	1	2	2	2	1	1	0	31
Gleaves & Eberenz 1995	1	2	1	1	0	2	0	1	1	1	2	2	1	2	1	1	1	1	21
Grave, Olios, Todisco & Bartocci 1996	2	1	1	1	1	2	0	1	1	1	2	1	1	2	2	1	1	1	22
Grave, Olios, Todisco, & Vanderlinden 1997	2	1	1	1	0	2	0	1	1	2	2	1	1	1	1	0	1	0	18
Grave, Rigamonti, Todisco & Olios, 1996	2	1	1	2	1	2	0	1	0	1	2	1	1	2	2	1	1	0	21
Greenes, Fava, Cioffi & Herzog, 1993	1	1	1	1	0	1	0	1	1	1	2	1	1	2	2	1	1	1	19
Hallings-Pott, Waller, Watson & Scragg 2005	2	2	2	1	1	2	0	1	2	1	2	2	1	1	2	2	1	1	26
Hartt and Waller 2002	2	2	2	2	2	2	2	2	2	2	2	1	1	2	2	2	1	2	33
Herzog 1993	2	2	2	2	1	2	0	2	2	1	2	1	2	2	1	2	1	1	27

Katz & Gleaves 1996	1	1	1	1	1	2	1	1	1	1	2	1	1	2	2	1	0	1	21
La Mela, Maglietta, Castellini, Amoroso & Lucarelli 2010	2	1	2	1	1	2	0	1	1	2	2	1	2	1	2	2	1	1	25
Leonard, Steiger & Kao 2003	2	2	2	1	1	2	1	2	2	1	2	1	1	2	2	1	1	1	26
Lyubomirsky, Caspe, & Sousa 2001	2	2	1	2	1	1	0	1	1	2	2	2	1	2	2	2	1	1	26
McCallum, Lock, Kulla, & Rorty 1992	1	2	1	1	0	2	1	1	1	1	2	1	1	0	1	1	1	0	18
Muehlenkamp, Claes, Smits, Peat & Vandereycken, 2011	2	1	2	2	2	1	1	1	2	2	2	1	1	1	1	2	1	1	26
Nagata, Kiriike, Iketani, Kawarada, & Tanaka 1999	2	1	2	2	1	2	0	1	2	2	2	1	1	2	2	2	1	1	27
Noma et al 2015	2	2	2	1	1	2	1	2	2	1	2	1	1	1	2	2	1	2	28
Oliosì & Grave 2003	2	2	2	2	2	2	0	2	2	1	2	1	1	2	2	2	1	1	29
Paul et al 2002	1	1	2	2	1	2	1	2	1	1	2	1	1	2	1	1	1	1	24

Schumaker, Warren, Carr, Schreiber & Jackson 1995	2	1	1	1	0	2	0	1	1	2	2	2	1	1	1	0	1	0	19
Schumaker, Warren, Schreiber & Jackson 1994	2	1	1	2	1	2	0	1	1	2	2	2	1	2	1	2	1	1	25
Vanderlinden, Spinhoven, Vandereycken & van Dyke 1995	2	2	1	2	1	2	0	2	1	2	2	1	1	2	2	1	1	1	26
Vanderlinden, Vandereycken, Van Dyck, & Vertommen 1993	2	1	1	1	0	1	0	1	1	1	2	1	1	2	2	0	1	0	18
Waller et al. 2003	2	2	1	2	1	2	0	1	2	2	2	1	1	2	2	1	1	1	26

Qualitative Study	Title	Authors	Abstract	Rationale	Recent LR	Aim	Ethical Issues	Methodology	Study design	Major concepts	Context	Sample method	Auditable	Data analysis credible	Results Presentation	Discussion	Transferable	Conclusion	Total
Ester, Espeset, Ragnfrid 2011	2	2	1	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2	34

Appendix C: Author guidelines for the Journal of Trauma and Dissociation

Guidelines for Authors

Editor Jennifer Freyd, PhD

1. MISSION. The *Journal of Trauma & Dissociation* is the official journal of the International Society for the Study of Trauma and Dissociation. The Journal is dedicated to publishing peer-reviewed scientific literature on dissociation, the dissociative disorders, posttraumatic stress disorder, psychological trauma and its sequelae, and on aspects of memory associated with psychological trauma and dissociation. The *Journal of Trauma & Dissociation* seeks manuscripts on theory, basic science research, clinical treatment and research related to psychological trauma, dissociation and traumatic memory in children and adults. The Journal welcomes contributions from anthropological, cross-cultural, neurobiological, pharmacologic, physiologic, psychological, psychometric, psychotherapeutic, and social viewpoints. The journal is published quarterly.

2. TYPES OF ARTICLES. The *Journal of Trauma & Dissociation* accepts review articles, theoretical articles, original research articles, clinical contributions, case reports, and letters to the editors. Regular articles are limited to 5,500 words and brief reports to 3000 words. Authors should specify the type of article they are submitting. The editors may reclassify the type of submission as appropriate. The Journal does not review or publish first person case reports (accounts of authors' personal psychological experiences). Due to our value on authenticity and veracity of crucial case information, composite case studies are not published. The Journal does not publish unsolicited book reviews but welcomes recommendations of recent books for book reviews. Book authors and publishers should send copies of books for review to either of the Book Review Associate Editors and should notify the Editors by email of the name and author of the books sent to the Book Review Editors.

3. PRIOR PUBLICATION. Submission of a manuscript to the *Journal of Trauma and Dissociation* represents a certification on the part of the author(s) that it is original material, and that neither the manuscript or a version of it has been published elsewhere, is not being considered for publication elsewhere, and has been approved by each author. Any form of publication other than an abstract of less than 400 words constitutes prior publication. This includes portions of symposia, proceedings, books/chapters, invited papers or any types of reports, and electronic databases. Authors wishing to submit manuscripts involving data or clinical observations previously used in published, in press, submitted (or to be submitted) papers should provide the Editor with this relevant information and an explanation regarding how those papers differ from the current submission.

4. AUTHORSHIP. Authorship credit should be limited to those who have made substantial contributions to the article in terms of design, data collection, data analysis and interpretation, and drafting and revising the manuscript. Acquisition of funding or provision of data alone is not sufficient to merit authorship. General supervision of the research group is not sufficient either. Individuals contributing less than a key role to the paper should be recognized in an Acknowledgement. Editors may require authors to justify the assignment of authorship. Each author must take public responsibility for the content of the article.

5. DISCLOSURE OF COMPETING INTERESTS. All forms of financial support must be stated in an Acknowledgment. Any commercial or financial involvements among the authors that might present the appearance of a conflict of interest in connection with the submitted article should be disclosed in the cover letter. Such involvements may include (but are not limited to) institutional or corporate affiliations not already specified, paid consultations, stock ownership or other equity involvement, patent ownership, travel funds, and royalties received from rating scales, inventions, or therapeutic methods. The Editor may share this information with the reviewers, but such involvements will not represent automatic grounds for rejection of the submission. A statement of such involvements will accompany the article, if published. Authors will be asked to attest in writing concerning any competing interests at the time of submission.

6. PATIENT INFORMED CONSENT AND PATIENT PRIVACY. Authors must have written informed consent from any patient/clients described in case study material. The authors must take steps to protect the identity of patients reported in case reports and elsewhere. Identifying information (e.g., names, initials, hospitals, dates) must be avoided or changed. Note that authors must both protect the integrity of the case study information such that crucial details for interpretation are retained, and protect patient privacy such that non-crucial details that could violate the privacy of the patient are changed. Authors who wish guidelines for protection of patient anonymity are referred to "Statements from the Vancouver Group, International Committee of Medical Journal Editors" in *British Medical Journal* 1991; 302: 1194. Authors submitting case study material will be required to complete a "Case Presentation Checklist" available at <http://dynamic.uoregon.edu/~jtf/jtd/>. Within the case report itself there should be a statement that the patient/client has given informed written consent for the publication and that the identity of the patient/client has been disguised by omission and alteration of non-crucial information.

7. INSTITUTIONAL REVIEW BOARD APPROVAL AND INFORMED CONSENT. Papers that report results of data collected from human participants must include a statement that written informed consent was obtained from participants after adequately explaining the study's procedures to them. Deviations from the standard written informed consent process should be fully explained. Approval by an Institutional Review Board or Ethics Committee should be documented and mentioned in the written report.

8. MANUSCRIPT LENGTH. Manuscript articles may be 1,500 to 5,500 words (approximately five to 18 double-spaced pages) including references and tables and figures, as appropriate to the type of article. Review articles, theoretical articles, research reports, and clinical discussions should contain a maximum of 5,500 words. Brief reports should be no more than 3,000 words. Letters to the editor may contain no more than 500 words and 3 references, and must be received within 10 weeks of the original article's publication. Letters to the editor are reviewed in a manner similar to other manuscripts. Lengthier manuscripts may be considered for special reasons or circumstances.

9. MANUSCRIPT FORMAT. Manuscripts must be prepared in a standard U.S. letter or A4 page format, double-spaced, with 1 inch or 3 centimeter margins on all sides. Text font should be proportional and with serif (e.g., Times New Roman 12 point font). Manuscripts should have the following order: Title page, abstract, text, references, tables and figures. Pages should be numbered beginning with the title page.

Title Page

Title page must include, title; authors and degrees; location of the institution and place where the work was done; corresponding author's name, address, telephone number, fax number, and e-mail address; word count; key words for index purposes; and acknowledgment of previous presentation, grant support, commercial support, or other credit. For mailing of a complimentary copy of the issue in which your article is published, please supply a postal mailing address for each author. Please place addresses of authors other than the Corresponding Author on a separate page immediately after the Title Page.

Abstract

A single paragraph abstract of 100-250 words must be provided.

Text

The text should contain an introduction that describes the objectives of the article and a review of the relevant scientific literature. Subsequent sections should describe the main subject matter (theoretical, clinical or research), a discussion of the subject matter, and conclusions. Research papers must include sections on methods and results, followed by discussion. Methods must contain an adequate description of instruments, research participants and statistical analyses, and results must be fully reported including the test values, degrees of freedom, whether tests were one- or two-tailed, probability and significance, and N values as appropriate. Research articles involving research with human participants must include a statement that informed consent was obtained or if not, why not.

Citations and References

For writing style and reference formats, the Journal uses the style of the Publication Manual of the American Psychological Association (6th Edition, 2010). We urge authors to consult this manual for formats not listed in the Information for Authors. The Publication Manual of the APA may be obtained from the APA Order Department, P.O. Box 92984, Washington, DC, 20090-2984, USA, www.apa.org/books/ordering.html.

Citations in Text

Use the author-date method within parentheses inserted into the text.

1. Work by one author: (Putnam, 1989).
2. Work by two authors: (Cardeña & Spiegel, 1993). Cite both names every time the reference occurs in the text. Use no comma between authors.
3. Work by three, four or five authors: First text citation: (Van der Hart, Van Kijke, Van Son, & Steele, 2000). Use commas after all authors. Subsequent text citations: (Van der Hart et al., 2000).
4. Work by six or more authors: In all text citations, use only the surname of the first author followed by et al. and the year of publication, e.g., (Ross et al., 1992).
5. Organizations as authors: Spell out the name of the organization the first time it is cited in the text. The organization name may be abbreviated in subsequent in-text citations only if the abbreviation is listed with the spelled out name in the first citation. First text citation: (International Society for the Study of Dissociation [ISSD], 1997). Subsequent text citations – use either of two formats: (ISSD, 1997) or (International Society for the Study of Dissociation, 1997).
6. Works by the same author(s) within the same year: Use the suffixes a, b, c, etc. following the date to distinguish works by the same author(s) within the same year. The first work cited in the text will be "a", the second work will be "b", etc., e.g., (Coons,

1994a, 1994b).

7. If there are two or more multiple author citations with the same first author within the same year, cite the surnames of as many subsequent authors as needed to distinguish references, e.g., (Van der Hart, Nijenhuis et al., 2001; Van der Hart, Steele et al., 2001).

8. Order of citation: When citing two or more works within the same parenthesis, list them in alphabetical order by the surname of the first author. Separate citations by semicolons. If citing the same author(s) more than once, place works in chronological order by publication dates separated by commas. Example: (Allen, 1997; Allison, 1978; Chu & Bowman, 2000; Kluft 1985a, 1985b, 1986; Kluft & Fine, 1993; Michelson & Ray, 1996; Ross et al., 1992).9. Quotations: Citations for quotations must contain page numbers, e.g., (Van der Hart et al., pp. 35-36).

Reference List

Consult the Publication Manual of the American Psychological Association for formats of types of references other than those listed below.

1. Journal article. Putnam, F.W., Guroff, J.J., Silberman, E.K., Barban, L., & Post, R.M. (1986). The clinical phenomenology of multiple personality disorder: Review of 100 recent cases. *Journal of Clinical Psychiatry*, 47, 285-293. Titles of and volume number journals should be italicized. Journal titles should have all important words capitalized.
2. Book. Putnam, F.W. (1997). *Dissociation in children and adolescents*. New York: Guilford Press. Titles of books should be italicized. Only the first word of book titles should be capitalized.
3. Edited Book: Kluft, R.P., & Fine, C.G. (Eds.). (1993). *Clinical perspectives on multiple personality disorder*. Washington, D.C.: American Psychiatric Press.
4. Book Chapter Goodwin, J. (1996). Childhood DID: The male population. In J.L. Silberg, (Ed.), *The dissociative child* (pp. 69-84). Lutherville, MD: Sidran Press. Page numbers must be included for book chapters.
5. Association Author: American Psychiatric Association. (2000). *Statement on therapies focused on memories of childhood physical and sexual abuse*. Washington, DC: Author.
6. Republished works: James, W. (1902/1961). *The varieties of religious experience*. London: MacMillan.
7. Formatting. Double-space all references. Please use a hanging indent format.
8. Authors. Please include all authors for each reference. Use commas after all authors except the last (including two author references).
9. Order of references. List references in alphabetical order by surname of first author. List multiple references by the same author(s) in chronological order from earliest to most recent publication date. List the sole-author works of an author before co-authored works.

Graphics, Tables, Figures, and Illustrations

All graphics must be "camera-ready." Tables should be prepared using standard word processing software (MS Word preferred). Illustrations should be prepared using either graphics software or artistically rendered in black ink so that they can be used either as they are or reduced in size. Whenever possible, figures should be submitted with the manuscript in digital form. Fonts should be proportional and sans serif (e.g., Arial). Author name(s) and manuscript name should be lightly written on the reverse of graphics. Indicate in the text the approximate placement of all graphics. Graphics including photographs are considered part of accepted manuscripts and are retained by the Publisher. If submitted graphics are unacceptable for publication, the Publisher reserves the right to redo the graphics and to charge the author(s) a fee of \$35 per hour for this service.

10. MANUSCRIPT STYLE. Authors who need a guide for English journal writing may wish to refer to the Style section of "Suggestions to Authors" in *Neurology* 1996; 46: 298-300. The editors are recommending only the writing style section. Use gender inclusive language. In referring to human beings, authors should use the phrases "in humans," "in humankind," or "in human beings," rather than the phrase "in man" or the word "man." Authors should avoid "he" in referring to generic persons as well as the awkward "he/she" construction by making the subject plural, e.g., "Therapists should inquire about amnesia whenever they suspect dissociation," rather than "A therapist should inquire about amnesia whenever he/she suspects dissociation." Alternatively, when referring to hypothetical persons, authors may alternate between male and female subjects. Numbers in the text. Authors should use Arabic numerals for numbers above nine, and for designators such as Case 4 or Patient 2. Authors should spell out numbers one through nine and numbers at the beginning sentences. Use the active voice whenever possible: We will ask authors that rely heavily on use of the passive voice to re-write manuscripts in the active voice. While the use of the phrase "the author(s)" is acceptable, we encourage authors to use first and third person pronouns, i.e., "I" and "we," to avoid an awkward or stilted writing style.

11. SUBMISSION AND REVIEW PROCESS. All manuscripts must be submitted on our submission website: <http://mc.manuscriptcentral.com/WJTD>. In addition authors will need to submit the Author Assurance form that can be found at: <http://dynamic.uoregon.edu/jjf/jtd/submission.html>. All submissions are peer-reviewed by anonymous reviewers. Reviewers provide written comments that are sent to the authors by the Editor. Authors are informed about the Editor's decision after completion of the review process. In most cases, we inform authors within eight to ten weeks following receipt of the manuscript as

to the results of the initial review of their manuscripts.

12. COPYRIGHT TRANSFER. Copyright ownership of manuscripts must be transferred to the Publisher by signature of author(s) prior to publication. It is permissible for a single author to sign the copyright transfer form provided that the author is authorized by all co-authors to sign on their behalf. We will send copyright assignment forms to the corresponding author upon acceptance of a paper.

Appendix D: Interview schedule

Interview Schedule

Following the principles of Interpretative Phenomenological Analysis (IPA) this interview schedule will be used as a guide to allow participants to explore their own experiences. The interview will be a narrative and may vary in structure based upon what participants wish to share and the direction they wish to go in. These questions are subject to change as they will be reviewed by the research team.

1. Opening Questions

- 1.1. How did you first hear about our research study? Why did you want to participate?
- 1.2. Can you tell me a little about your diagnosis of psychosis? What's it like when you are unwell? What do you experience?

2. Dissociation

You have said that you can sometimes have experiences where you may have forgotten what you have done over a number of days, having out of body experiences, feeling that your body or parts of your body are not your own or waking up somewhere and not remembering how you got there or what you were doing there.

- 2.1. When did you first notice that you had these experiences? (What was it like for you?)
- 2.2. How do you understand these experiences?
- 2.3. How do you make sense of it? (How do you feel about this? How does it affect you? Has this changed over time?).
- 2.4. Is there anything that you think impacts on these experiences? (What makes it worse/better/easier to manage?).

3. Coping/help seeking

- 3.1. How do you manage/cope when you have these experiences? (What strategies do you use?).
 - 3.2. When you first noticed these experiences, did you seek any support? (When did you first seek help? Who did you first tell about it? What was your experience of this support? Were there any barriers? Internal and external barriers).
 - 3.3. What is your experience of the support you currently receive? (Who have you told about it? How and why did you access this support? What do you find helpful/unhelpful?).
 - 3.4. Is there anything else that could have helped?
4. Is there anything further that you would like to talk about or feel that we missed?

Prompts

- Is there anything else that you think is important to talk about?
- Is there anything else that you would like to talk about?

Appendix E: Confirmation of Coventry University ethical approval



Certificate of Ethical Approval

Applicant:

Aarti Daya

Project Title:

Experiences of dissociation in individuals with psychosis

This is to certify that the above named applicant has completed the Coventry University Ethical Approval process and their project has been confirmed and approved as Medium Risk

Date of approval:

16 September 2015

Project Reference Number:

P27635

Appendix F: Participant information sheet

Participant information sheet

Title of Project: Experiences of dissociation in individuals with Psychosis.

I (Aarti Daya) would like to invite you to participate in our research study. Before you decide to take part in this project we would like you to understand what it is, why it is being carried out and what it would involve for you. Please read this information carefully and feel free to contact me if you have any questions or if you are unsure about anything.

What is the purpose of the study?

The purpose of this research is to explore the experiences of dissociation in individuals with psychosis. Dissociation can be times where you may have forgotten what you have done over a number of days, having out of body experiences, feeling that your body or parts of your body are not your own or waking up somewhere and not remembering how you got there or what you were doing there. It is hoped that this will bring a better understanding of dissociation within the context of psychosis and support the development of new ways or methods of working.

Why have I been invited to participate?

A number of support groups for individuals who have received a diagnosis of psychosis have been invited to participate in this study. The researcher (Aarti Daya) has provided these support groups with a summary of the study and the researcher contact details so that these can be advertised. You have been asked to participate as you have a diagnosis of a psychotic illness or disorder, you are attending a support group in relation to this and you have shown an interest in being a part of this study.

Do I have to take part?

It is up to you whether or not you would like to participate in this research study. If you are happy to participate in the research, you will be asked to sign a consent form. If you choose not to participate or withdraw from the study this will not impact or affect the support you are receiving.

What are the inclusion criteria?

Please check the list below to see if you meet the criteria to participate in the study.

- ☐ You have a diagnosis of a psychotic disorder or illness.
- ☐ You do not have a diagnosis of Bi-polar disorder.
- ☐ Your psychosis is not due to an organic condition (such as Dementia) or a substance induced psychosis.
- ☐ You are not currently accessing acute services, inpatient services or crisis services.
- ☐ You have had dissociative experiences for example, times where you may have forgotten what you have done over a number of days, having out of body experiences, feeling that your body or parts of your body are not your own or waking up somewhere and not remembering how you got there or what you were doing there.

If all of the above statements are true for you then you are eligible to participate in the study. If you would like to participate you can contact the researcher whose details are provided below.

What will I have to do?

The study will involve a one to one interview with the principal researcher which will last approximately one hour and you will be asked question about your experiences of

dissociation. With your permission the interview will be digitally recorded and then transcribed word for word. All information collected from you will be kept securely in a lockable cabinet and remain confidential. Confidential information will only be shared if there is concern of harm to you or others as the researcher has a duty to pass this information on to relevant agencies.

Any identifiable information will be removed when the interviews are transcribed. As all identifying details will be removed or anonymised, it will not be possible to identify participants regardless of how much other data exists. The research team will have access to the anonymised transcripts to support with analysis. The transcripts will be analysed and themes will be identified. The researcher's details are included at the end of this information sheet. Should you have any questions at any point in the research study, please feel free to contact the researcher.

What if I change my mind?

You can decide not to participate in the study at any time prior to being involved in the interview. If at any point during the interview you wish to withdraw from the study then you are free to do so. After the interview your data will be secured in a locked filing cabinet and you may withdraw within 2 weeks by contacting the researcher. If you do withdraw at this stage, the information we have from the interview will be destroyed. If you choose to withdraw from the study, this will not impact on any of the services or support that you are receiving.

What are the possible disadvantages and risks of taking part in the study?

Although it is not the intention of the study to cause you any distress, you will be asked questions that may bring up sensitive topics or memories which could cause you some distress. It is therefore possible that taking part in the study may cause you to feel upset. There will be time at the end of the interview for any further questions you may have and you will also be provided with a list of additional support services you might choose to access.

What are the possible benefits of taking part?

Whilst there is not likely to be any direct benefit to you in taking part in this study, it will help research and clinical staff to obtain a greater understanding of experiences of dissociation. It is hoped that by gaining a better understanding, the study will then help inform and improve services for supporting individuals with these experiences in the future.

How will my information be kept confidential?

All data collected will be held in accordance with the Data Protection Act (1998). All confidential information will be kept in a lockable filing cabinet which only the principal researcher has access to. Confidential information will only be shared if there is concern of harm to you or others as the researcher has a duty to pass this information on to relevant agencies. Digital recordings will be kept in a password protected folder, recordings will be transcribed word for word and all identifying material will be removed. Each participant will be given a participant code or pseudonym, known only to the principle researcher, and keys to these pseudonyms/codes will be kept separate from the transcribed material. In accordance with Coventry University's guidelines the data will be destroyed five years after the completion of the research. When the research report is published any identifiable information relating to you will be anonymised.

What will happen to the results of the research study?

The study will be submitted as part of the researcher's thesis towards completion of the Doctorate in Clinical Psychology at Coventry University and the University of Warwick. It is the intention of the researcher to submit the research study to an academic journal for publication. Summaries of the study will be made available to participants interested in receiving this and the whole report will be accessible through Coventry University.

Who has reviewed the study?

The study has been reviewed and approved by the department of Clinical Psychology at Coventry University and the University of Warwick. It has also been granted ethical approval from Coventry University Ethics Committee.

Researcher's contact details:

If you have any questions or you would like further information please contact the principal researcher:

Research Team**Aarti Daya (Principal Researcher)**

Clinical Psychology Doctorate
Faculty of Health and Life Sciences
James Starley Building
Coventry University
Priory Street
Coventry
CV1 5FB

Email: dayaa3@uni.coventry.ac.uk

Eve Knight (Research Supervisor)

Appendix G: Participant consent form

Participant consent form

Title of project: Experiences of dissociation in individuals with Psychosis.

Researcher: Aarti Daya

Please initial
each box

1. I confirm that I have understood the participant information sheet for the above study. ☐
2. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐
3. I understand that my participation in the research is entirely voluntary and that I am free to withdraw from the study up to 2 weeks following the interview and without having to give a reason. I understand that should I decide to withdraw my data will be destroyed. ☐
4. I consent to the interview being recorded on a digital dictaphone and understand that this will be kept securely and the recording destroyed following completion of the study. ☐
5. I give permission for the information provided in the interview to be used in analysis and in the report write-up. ☐
6. I understand that all documents relating to the research will be anonymised and kept confidential; interviews will be transcribed with identifiable information removed and kept in a locked cabinet. ☐
7. I understand that the research team will have access to anonymised transcripts to help with analysis. ☐
8. I understand that the data collected, including quotations, may be published in a write-up of the research, but that all data will be anonymised. ☐
9. I understand that information collected, including transcripts, will be retained by Coventry University for 5 years then destroyed in line with their regulations. ☐
10. I would like to receive a summary of the study once it is complete. ☐
11. I agree to participate in the above study. ☐

Signed: _____

Name: _____

Date: _____

Signature of researcher: _____

Date: _____

Appendix H: Research summary sheet

Research Summary: **Experiences of dissociation in individuals with Psychosis**

I would like to invite you to participate in a research study. The purpose of this study is to explore the experiences of dissociation in individuals who have had psychosis. Dissociation can include times where you may have forgotten what you have done over a number of days, or waking up somewhere and not remembering how you got there or what you were doing there. It could also mean having out of body experiences, feeling unreal or that your body is not your own. Previous research has shown that there is a relationship between psychosis and dissociation. However, little is known about individuals' experiences of dissociation prior to, during and following psychosis.

By exploring experiences of dissociation it can help research and clinical staff to gain a greater understanding of the experience of dissociation and how it can overlap with psychosis. It is hoped that by gaining a better understanding, the study will then help inform and improve services for supporting individuals with these experiences in the future.

If you would like to participate in this study please contact:

Aarti Daya

Clinical Psychology Doctorate
Faculty of Health and Life Sciences
James Starley Building
Coventry University
Priory Street
Coventry
CV1 5FB
dayaa3@uni.coventry.ac.uk

Email:

Appendix I: Demographic information sheet

Demographic Information

Participant No: _____

Age: _____

Gender (male/female): _____

Ethnicity: _____

Diagnosis: _____

Appendix J: Additional support sheet

Additional Support

Samaritans

Samaritans can help you explore your options, understand your problems better, or just be there to listen.

Tel: 08457 90 90 90

Email: jo@samaritans.org

Website: <http://www.samaritans.org/>

Mind

Provide advice and support to anyone experiencing a mental health problem.

Tel: 0300 123 3393 (Mon-Fri 9am to 6pm)

Email: info@mind.org.uk

Website: <http://www.mind.org.uk/>

Rethink

Offers practical advice on issues such as welfare benefits, debts, community care and carers rights. They also offer general help on living with mental illness, medication, care and treatment.

Tel: 0300 5000 927 (10am to 2pm, Monday to Friday)

Website: <http://www.rethink.org/>

SANEline

SANE offers emotional support and information to anyone affected by mental health problems through their helpline, email services and online Support Forum where people share their feelings and experiences.

Tel: 0300 304 7000 (6pm to 11pm daily)

Website: <http://www.sane.org.uk/>

First Person Plural

Provide information and facilitate mutual support for adults who experience dissociative identity (multiple personality) or similar complex dissociative disorders, and their friends, family and carers. They can be contacted through their website.

Website: <http://www.firstpersonplural.org.uk/>

Hearing Voices Network

They offer information, support and understanding to people who hear voices and those who support them.

Tel: 0114 271 8210

Email: nhvn@hotmail.co.uk

Website: <http://www.hearing-voices.org/>

Voice Collective

For children and young people who hear, see or sense things others do not.

Tel: 020 7911 0822

Email: info@voicecollective.co.uk

Website: <http://www.voicecollective.co.uk/>

Mental Health Services (including crisis support)

Tel: 0300 200 0011

Website: <http://www.covwarkpt.nhs.uk/>

Appendix K: Excerpt of transcript

576 *I: Okay umm (pause) where we're thinking about you said there wasn't anything that makes*
577 *it easier or better at the moment in terms of these out of body experiences (mm) and like*
578 *those experiences at night (mm) where you can see yourself as a child there in that room*
579 *umm have you ever had any err tried anything in terms of managing or coping or any*
580 *strategies that you used that has helped?*
581
582 *P: There's this thing that happened it's just happened around about a year six months a year*
583 *that I've when I'm with the grandchildren (mm) I become grandpa (mmhm) and P2 doesn't*
584 *exist I exist but I'm watching someone else and but when I'm having fun I don't understand*
585 *what the fun is (mmhm) I know I'm chasing my grandchildren round and they're Grandpa*
586 *Grandpa they're happy and I'm happy they're happy but I'm only happy in grandpa I'm not*
587 *happy in P2 (mmhm) I'm still getting the the voices from P2's side but I'm switch them off*
588 *when I'm on I'm on the grandpa side (mmhm) and I'm managing to do running round parks*
589 *and chase them and have fun but I haven't quite figured it out (mmhm) you know how I'm*
590 *allowed to get that time (yeah) it's just like I don't feel I feel I'm a different person (mm) as*
591 *longs as they're calling me grandpa I'm alright (mmhm) but if my wife says P2 then it kind of*
592 *throws me so I said see when I'm with the children so I says just call me grandpa you know*
593 *like we call I call my wife's mum granny I don't call her by name and I have since I've know*
594 *my wife we call her granny I don't know why but it just seems right and this feels right (mm)*
595 *you know feels like I can get away from it (yeah) by being grandpa you know P2 so so I've*
596 *sort of got into that trained myself into that that thought (mmhm) but I still don't know*
597 *understand then I get back to P2 did I really enjoy did I have fun was that fun you know I I I*
598 *don't can't quite figure it out but I know I know we're getting away from it (mm) and that's*
599 *good (yeah) it's quite a good thing.*
600
601 *I: And is that getting away from erm the memory loss and things or is that getting away from*
602 *the voices?*
603
604 *P: It gets me away from everything I don't think about anything else err grandpa doesn't care*
605 *about P2 (mm) you know grandpa's only got his concern for his grandchildren (mmhm) and I*
606 *try to figure it out but I I try not I'm trying not to complicate it I'm trying to keep it black and*
607 *white (mmhm) rather than reading too much into it if P2 hasn't had a good time so what you*
608 *know Grandpa has you know and I can try and aspire to that but I can't I don't want to*
609 *complicate it (yeah) I felt if I read too much into it then I may not get back into grandpa mood*
610 *and then I'm going to suffer (mmhm) and I want to be with my grandchildren I want them to*
611 *know grandpa is the one that chases them around and acts like a six year old it's I can act*
612 *like I'm a six year old and not need to worry about it I chase them round the park they're*
613 *having fun they love it and it feels right (mm) but I don't when I'm back to there I don't try and*
614 *dwel on it too much (yeah) or try and focus on how I done that or what I done that or why I*
615 *done that I just know that it's okay and my wife said it's okay and and my daughter's safe*
616 *and feels fine and that's fine that's good (mm) but that's the only time I get peace (yeah)*
617 *without having to worry too much and when I go back I don't I don't relive (mm) it's done it's*
618 *finished you know and err if sort of ask me a week later you know what I I I wouldn't know I*
619 *wouldn't remember (as in what you did with your grandchildren?) what I done with my*
620 *grandchildren and if my wife said a week later you were in the park I I err I wouldn't recall I*
621 *don't recall (mm) it's like it happens then and it's done (yeah) and I have to go back into my*
622 *my other self (mm) changes into another person and I think and when I'm myself I don't even*
623 *(pause) relate back to it I don't ere err it's as if it doesn't exist but it does at the time (mm).*

Appendix L: Stages of Interpretative Phenomenological Analysis

Adapted from Smiths, Flowers and Larkin (2009)

Stage 1: Reading and re-reading

This entailed listening to the audio recording of each interview and reading the transcripts a number of times while holding the participant and interview in mind in order to immerse oneself within the data.

Stage 2: Initial noting

For each participant, line-by-line analysis of each transcript was undertaken initially noting anything of interest. These can take the form of descriptive, linguistic or conceptual comments.

	A	B	C	D	E
1	Superordinate Themes	Sub themes	Emerging Themes	Initial Codes	Quotes
2				Become another person	when I'm with the grandchildren (mm) I become grandpa
3				Difference, another person, I'm not happy	I'm only happy in grandpa I'm not happy in P
4				I'm a different person	I feel I'm a different person (mm) as long as they're calling me grandpa I'm alright
5				Different entity, always sad, worrying, Grandpa free, Grandpa doesn't worry, Granpa makes sure others are safe and happy, danger to others?	they haven't done it through P they've done it through Grandpa (mm) it's it's a different entity it's it's not it's not me because I don't know how to live like that I don't know how to be happy (yeah) being P it's always a sad worrying about tonight and worrying about things but grandpa doesn't worry about anything (mmhm) he just worries about the children make sure that they're safe and that they're happy and err yeah there's no serious side (mm) to grandpa but there is to P (yeah) yeah.
6				Don't exist	P doesn't exist I exist but I'm watching someone else
7				Don't recall, have to go back, no control, doesn't exist, don't relate back to it	if my wife said a week later you were in the park I I err I wouldn't recall I don't recall (mm) it's like it happens then and it's done (yeah) and I have to go back into my my other self (mm) changes into another person and I think and when I'm myself I don't even (pause) relate back to it I don't ere err it's as if it doesn't exist but it does at the time (mm).
8				Don't understand, lack of fun	when I'm having fun I don't understand what the fun is
9				Don't read into it, avoid thinking about it, self as less important, don't want to complicate it, complicate it - is it not complex?	rather than reading too much into it if P hasn't had a good time so what you know Grandpa has you know and I can try and aspire to that but I can't I don't want to complicate it
10				Contrast	there's no serious side (mm) to grandpa but there is to P
11				Switch off voices	I'm still getting the the voices from P's side but I'm switch them off when I'm on I'm on the grandpa side

Stage 3: Developing emergent themes

Within this step the researcher identified themes within the data and their initial notes. It was an attempt to create a concise statement of what was crucial in the various notes made on a particular part of the transcript, reflecting the participant's thoughts and the researcher's interpretation.

	A	B	C	D	E
1	Superordinate Themes	Sub themes	Emerging Themes	Initial Codes	Quotes
12			Provides relief	Right, get away from it	this feels right (mm) you know feels like I can get away from it
13			Uncertainty about the experience, Holding on to the experience	No understanding, unsure what has happened, can't figure it out, get away, good thing/helpful experience	I still don't know understand then I get back to P did I really enjoy did I have fun was that fun you know I I don't can't quite figure it out but I know I know we're getting away from it (mm) and that's good (yeah) it's quite a good thing.
14			Experience brings relief	Escape/relief, get away, Grandpa has a particular focus	It gets me away from everything I don't think about anything else err grandpa doesn't care about P(mm) you know grandpa's only got his concern for his grandchildren
15			Trying to make sense	Not figured out	I'm managing to do running round parks and chase them and have fun but I haven't quite figured it out
16			Want to understand but it's too complicated	Try to understand experience, don't want to complicate it, keep it simple, black and white - interesting choice of words is this wanting to keep things separate or the way he may compare himself and grandpa	I try to figure it out but I I try not I'm trying not to complicate it I'm trying to keep it black and white
17			Holding on to other persona, Fear of loss, lack of control	Just call me grandpa, lack of control, shared way of coping	but if my wife says P then it kind of throws me so I said see when I'm with the children so I says just call me grandpa
18			Avoid seeking an understanding	Trying to keep it simple, complicate it - is it not complicated?	rather than reading too much into it if P hasn't had a good time so what you know Grandpa has you know and I can try and aspire to that but I can't I don't want to complicate it
19			Experience provides relief, Hold on to experience	Not get back to grandpa, afraid to let go of other persona, without it there will be suffering	I felt if I read too much into it then I may not get back into grandpa mood and then I'm going to suffer
20			Avoid thinking about the experience, Not knowing is safer	Don't dwell on it too much, just know it's okay	I don't when I'm back to there I don't try and dwell on it too much (yeah) or try and focus on how I done that or what I done that or why I done that I just know that it's okay

Stage 4: Searching for connections across emergent themes

The researcher mapped how the identified themes fit together. At this stage some of the themes were discarded depending on how they fit with the research question.

	A	B	C	D	E
1	Superordinate Themes	Sub themes	Emerging Themes	Initial Codes	Quotes
2		Can't trust others to help	Can't talk to others, Fear not being believed	Reluctance to talk to others, Not believed, Given medication	No I didn't cause I didn't know what it was I'm always I'm always reluct I'm reluctant to talk to psychiatrist and things about voices and that because they don't believe it they don't believe that you should you know to them take medication it'll go away
3			Professionals take too long to help	Support only when could no longer cope	they wouldn't diagnose me they wouldn't give me any help they were constantly would just write see you in three months then my wife says look I'm holding you responsible because I can't cope anymore I can't take care of him then they started saying then the psychi psychiatrist came in ten minutes later and to and that's when I started I
4			Not listened to, Worry about being put in hospital	Not listened to, believe they will have o go to hospital	I don't think they listen to what I'm saying and I think they would just say that I was ill so I'd have to go to the hospital and and get treatment
5			Can't trust others, Others won't listen/understand	Others don't listen, Telling lies, Don't say just live	they don't listen err you know err they think if I have a good day I'll I I'm telling lies (mm) there are things I just don't say I try and just live
6					
7		Uncertain relief	Experience provides relief and uncertainty	Pressure can trigger experience, Switching off gives relief, uncertain about what happened	and I put too much thought into it so I I get pressure then before I know it I just blanked out and I'm lying on the floor and I say what the hell happened (mm) says that's because you knew you had two places to go and and then I start arguing with
8			Uncertainty about the experience, Holding on to the experience	No understanding, unsure what has happened, can't figure it out, get away, good thing/helpful experience	I still don't know understand then I get back to P did I really enjoy did I have fun was that fun you know I I I don't can't quite figure it out but I know I know we're getting away from it (mm) and that's good (yeah) it's quite a good thing.
9			Avoid thinking about the experience, Not knowing is safer	Don't dwell on it too much, just know it's okay	I don't when I'm back to there I don't try and dwell on it too much (yeah) or try and focus on how I done that or what I done that or why I done that I just know that it's okay

Stage 5: Moving to the next case

This entails moving to the next participant's transcript and repeating stages one to four. When moving on to the next transcript, as far as possible, previous themes and ideas were set aside to allow for new themes to emerge.

Stage 6: Looking for patterns across cases

The researcher looked for patterns across all the transcripts, searching for themes that are shared and different. These themes were drawn together to create the super-ordinate theme. Each participant was colour coded.

	A	B	C	D	E
1	Superordinate Themes	Sub themes	Emerging Themes	Initial Codes	Quotes
2	Emotional impact of unsafe uncertainty	Unsafe trust	Not listened to, Worry about being put in hospital	Not listened to, believe they will have to go to hospital	I don't think they listen to what I'm saying and I think they would just say that I was ill so I'd have to go to the hospital and and get treatment
3			Can't trust others, Others won't listen/understand	Others don't listen, Telling lies, Don't say just live	they don't listen err you know err they think if I have a good day I'll I I'm telling lies (mm) there are things I just don't say I try and just live
4			Feeling dismissed, Unheard, Wanting an explanation	Not listened to	the psychiatrist he he's always been very good but he would just sit there and go mmmm (laughs) and I wanted someone to explain to me why I was getting these weird things going on
5			Feeling mistreated, Repeating distressing experiences	Destructive, Exacerbating, Repeating distressing experiences	it is really quite destructive act if you think about it someone who's having problems because of being treated badly in that way and then they do that exactly the same thing in a way the whole ethos of (pause) treating people um respecting not exacerbating (mm) what they've already been through and they're supposed to be in
6		Uncertain fear	Fear	Escape, scary experience	it's pretty scary being out of my body (mm) but probably not as scary as being in my
7			Danger when unaware, Different state, Vulnerable, Helpless, Don't understand the experience	Needing to be found, Different state, Don't understand	they would send out my neighbour my wife would always go tell my neighbour to go and find me and they would find me in a different state (mm) and bring me back I would say I don't understand how that could have happened
8			Weird experience, Question what happened, Uncertainty	It feels weird, What did I do?	it feels weird because you just you just wonder I always think what did I do you know in those three days
9			Fear disappearing, Unsafe	Fear disappearing	Umm that I'm going to completely disappear yeah it's quite horrible actually very
10					
11					

Appendix M: Metaphors

The bothy

"A bothy is a basic shelter that can be found in remote areas of Britain, particularly in the Scottish mountains. They are left unlocked and free to use for people wishing to rest on a long journey. This can be used as a metaphor for when we are navigating our own internal terrain. There will be times when we feel tired and wish to rest for a while. This is ok; we do not need to struggle against this feeling of wishing to take shelter in our bothy. We can use this place as a sanctuary to take time to recharge our energy until we feel ready to get moving again."

"We are going to do a guided imagery exercise now to create our own bothy: a place of rest in our minds. This exercise has a strong focus on your mental self. Nonetheless, allow it to be a holistic (mind, body, spirit) experience. It involves mental imagery and the use of imagination. For some people, these seem to come easily, while for others they require more practice. Through practice, the imagery will become stronger and easier to reach."

(NHS Fife and Fife Bipolar Group, 2014, p. 65)

Tug-of-war with a monster metaphor

The situation you are in is like being in a tug-of-war with a monster. It is big, ugly, and very strong. In between you and the monster is a pit, and so far as you can tell it is bottomless. If you lose this tug-of-war, you will fall into this pit and will be destroyed. So you pull and pull, but the harder you pull, the harder the monster pulls, and you edge closer and closer to the pit. The hardest thing to see is that our job here is not to win the tug-of-war.... Our job is to drop the rope.

(Hayes et al., 2003, p. 109)

This piece of paper is my universe metaphor

Picture a pad of paper. Imagine taking the pad of paper and holding it to your face. This 8.5-by-11-inch sheet of paper looms so large in your visual field that it has become your universe in this moment; you can't see anything else at all. The pad itself has not changed, of course, but your perspective has.

Life events are like this pad, This is true whether we are talking about internal events like thoughts and feelings, or external ones like circumstances. In all cases, distress and suffering come from "getting too close" to these events and the thoughts and perceptions that accompany these events.

(Kozak, 2009, p. 118)

Passengers on the bus

Suppose there is a bus and you're the driver. On this bus we've got a bunch of passengers. The passengers are thoughts, feelings, bodily states, memories, and other aspects of experience. Some of them are scary, and they're dressed up in black leather jackets and they have switchblade knives. What happens is that you're driving along and the passengers start threatening you, telling you what you have to do, where you have to go. "You've got to turn left," "You've got to go right," and so on. The threat they

have over you is that if you don't do what they say, they're going to come up front from the back of the bus.

It's as if you've made deals with these passengers, and the deal is, "You sit in the back of the bus and scrunch down so that I can't see you very often, and I'll do what you say pretty much." Now what if one day you get tired of that and say, "I don't like this! I'm going to throw those people off the bus!" You stop the bus, and you go back to deal with the mean-looking passengers. But you notice that the very first thing you had to do was stop. Notice now, you're not driving anywhere, you're just dealing with these passengers. And they're very strong. They don't intend to leave, and you wrestle with them, but it just doesn't turn out very successfully.

Eventually, you go back to placating the passengers, trying to get them to sit way in the back again where you can't see them. The problem with this deal is that you do what they ask in exchange for getting them out of your life. Pretty soon they don't even have to tell you, "Turn left" – you know as soon as you get near a left turn that the passengers are going to crawl all over you. In time you may get good enough that you almost pretend that they're not on the bus at all. You just tell yourself that left is the only direction you want to turn. However, when they eventually do show up, it's with the added power of the deals that you've made with them in the past.

Now the trick about the whole thing is that the power the passengers have over you is 100% based on this: "If you don't do what we say, we're coming up and we're making you look at us." That's it. It's true that when they come up front they look as if they could do a whole lot more. They have knives, chains, and so forth. It looks as though you could be destroyed. The deal you make is to do what they say so they won't come up and stand next to you and make you look at them. The driver (you) has control of the bus, but you trade off the control in these secret deals with the passengers. In other words, by trying to get control, you've actually given up control! Now notice that even though your passengers claim they can destroy you if you don't turn left, it has never actually happened. These passengers can't make you do something against your will.

(Hayes et al., 2003, p. 157-158)

Office hours

One tool I teach people is *scheduled worrying*. Like office hours, a dedicated time is given to worry and kvetching. During this time you mindfully allow yourself to project into the future, mull over the past, write things down, problem-solve, and dwell on fears and worry about outcomes. And then, when thoughts present themselves with urgency outside of this dedicated time, you can remind them with gentle firmness that office hours are at 3 p.m. and they'll be dealt with then.

(Kozak, 2009, p. 139)

Man in the hole

The situation you are in seems a bit like this. Imagine that you're placed in a field, wearing a blindfold, and you're given a little tool bag to carry. You're told that your job is to run around this field, blindfolded. That is how you are supposed to live life. And so you do what you are told. Now, unbeknownst to you, in this field there are a number of widely spaced, fairly deep holes. You don't know that at first – you're naïve. So you start running around and sooner or later you fall into a large hole. You feel around, and sure enough, you can't climb out and there are no escape routes you can find. Probably what you would do in such a predicament is take the tool bag you were given and see

what is in there; maybe there is something you can use to get out of the hole. Noe suppose that the only tool in the bag is a shovel. So you dutifully start digging, but pretty soon you notice that you're not out of the hole. So you try digging faster and faster. But you're still in the hole. So you try big shovelfuls, or little ones, or throwing the dirt far away or not. But still you are in the hole. All this effort and all this work, and oddly enough the hole has just gotten bigger and bigger. Isn't that your experience? So you come to see me thinking, "Maybe ne has a really huge shovel – a gold-plated steam shovel." Well, I don't. And even if I did I wouldn't use it, because digging is not a way out of the hole – digging is wht makes holes. So maybe the whole agenda is hopeless – you can't dig your way out, that just digs you in.

(Hayes et al., 2003, p. 101-102)